

"Subject", "Body", "From: (Name)", "From: (Address)", "From: (Type)", "To: (Name)", "To: (Address)", "To: (Type)", "CC: (Name)", "CC: (Address)", "CC: (Type)", "BCC: (Name)", "BCC: (Address)", "BCC: (Type)", "Billing Information", "Categories", "Importance", "Mileage", "Sensitivity"
>"Fwd: 2001 Electrical safety Meeting", "
>Date: Sat, 05 May 2001 10:40:18 -0400
>From: Larry Perkins <lperkins@conc.tds.net>
>Subject: 2001 Electrical safety Meeting
>To: doe_esc@lbl.gov

>
>The official announcement for the meeting will be forth coming from DOE
>very soon, but here is some preliminary information. A draft agenda is
>also attached.

>
>Larry

>
>
>

>The 2001 DOE Electrical Safety Meeting will be held at the Princeton
>Plasma Physics Laboratory in Princeton, New Jersey.

>
>The meeting is scheduled for August 1-2, 2001. Also planned is an
>8-hour NFPA (70-E) class on Tuesday, July 31, for those people
>interested in attending. This schedule will allow people who want to
>attend the NPFA 70E class to travel on Monday, and for those
>participating in the general sessions to travel on either Monday or
>Tuesday. The DOE Electrical Safety Meeting will be held on Wednesday
>and Thursday, allowing the participants to return home on Friday.

>
>A preliminary agenda is attached. Some of the speakers who are
>planning to present sessions at this year's meeting are James Stallcup,
>Allen Bingham, Ernie Jones, Karen D'Alessio, Craig Schumann, Keith
>Gershon, Mark Regan, Doug Lovette, Tom Neal, David O'Neill, Keith Schuh,
>Jerry Phillips, George Causer, and Harvey Trager. If you have other
>topics or speakers you would like to see on the agenda, please let me
>know as soon as possible but no later than May 31, so we can see if we
>can work them into the program.

>
>The meeting sessions will be held in conference space made available at
>the laboratory, and I will relay the details to you as soon as they are
>confirmed. There is no charge for the NFPA 70-E class or the Electrical
>Safety Meeting. However, you will need to bring a copy of NFPA 70-E with
>you if you plan to attend this class. At the end of this email message,
>I have included a list of hotels in the Princeton area (no block of
>rooms has been set aside for the meeting). Let me know as soon as
>possible if you will be able to attend so I can arrange for adequate
>space and materials.

>
>Please send me the following registration information as soon as
>possible:

>
>Name:
>Facility:
>Phone Number:
>Email address:
>I plan to attend the NFPA 70-E class: Yes ____ No _____

>

>Hotels:

>Novotel - 609-520-1200

>Holiday Inn - 609-452-2400

>Residence Inn - 609-683-0001

>Americasuites - 609-720-0200

>Summerfield Suites Hotel - 609-951-0009

>

>

>We expect this year's meeting to be another excellent opportunity to

>share information on electrical safety, and I look forward to seeing you

>there.

>

>

>

", "Kevin

Norris", "norriskp@ornl.gov", "SMTP", "ballja@sns.gov;shukla@ornl.gov;barnettwejr@ornl.gov;rustkr@ornl.gov;hunterwt@ornl.gov;devanwr@ornl.gov;deanderson@sns.gov;mckenzie@ornl.gov;rfuja@sns.gov;reece@ornl.gov;holik@sns.gov;battlere@ornl.gov;whitem@sns.gov;wrightpa@sns.gov;woodrj@ornl.gov;dodsong@sns.gov", "ballja@sns.gov;shukla@ornl.gov;barnettwejr@ornl.gov;rustkr@ornl.gov;hunterwt@ornl.gov;devanwr@ornl.gov;deanderson@sns.gov;mckenzie@ornl.gov;rfuja@sns.gov;reece@ornl.gov;holik@sns.gov;battlere@ornl.gov;whitem@sns.gov;wrightpa@sns.gov;woodrj@ornl.gov;dodsong@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "kornegayfc@sns.gov;smithdw2@sns.gov", "kornegayfc@sns.gov;smithdw2@sns.gov", "SMTP;SMTP"

"Electrical Safety Committee Minutes", "Distribution:

There will be an Electrical Safety Committee Meeting in the RATS building on Thursday, August 9 from 9-11:30am. Also, I have attached the minutes from the last meeting and I would like for you to edit the minutes and bring changes with you to the meeting.

Marion White will not be able to attend the meeting due to travel and has asked Paul Holik to facilitate the meeting. Also, I will be in CPR Training on that day and Muriel Tate will sit in for me to take notes.

Tks,

Jackie

", "Jackie B.

Smith", "smithjbl@sns.gov", "SMTP", "ballja@sns.gov;shukla@ornl.gov;barnettwejr@ornl.gov;rustkr@ornl.gov;hunterwt@ornl.gov;devanwr@ornl.gov;deanderson@sns.gov;rfuja@sns.gov;sfisher@sns.gov;norriskp@ornl.gov;dodsong@sns.gov;holik@sns.gov;battlere@ornl.gov;woodrj@ornl.gov;cutlerri@sns.gov", "ballja@sns.gov;shukla@ornl.gov;barnettwejr@ornl.gov;rustkr@ornl.gov;hunterwt@ornl.gov;devanwr@ornl.gov;deanderson@sns.gov;rfuja@sns.gov;sfisher@sns.gov;norriskp@ornl.gov;dodsong@sns.gov;holik@sns.gov;battlere@ornl.gov;woodrj@ornl.gov;cutlerri@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "mwhite@sns.gov;mckenzie@ornl.gov;kornegayfc@sns.gov;holtkamp@sns.gov;gurd@sns.gov;dammr@sns.gov;wrightpa@sns.gov;reece@sns.gov;tatemc@sns.gov", "mwhite@sns.gov;mckenzie@ornl.gov;kornegayfc@sns.gov;holtkamp@sns.gov;gurd@sns.gov;dammr@sns.gov;wrightpa@sns.gov;reece@sns.gov;tatemc@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP"

"Fwd: Electrical Safety Committee Minutes", "Committee Members:

I will be off-site tomorrow and will not be able to attend tomorrow's meeting.

I am still working on a document for inspecting non-NRTL equipment. To enhance this documentation, I would like for

to serve as the electrical safety officer for that group. This certainly will establish more coherency in the electrical safety committee tasks. Nevertheless, it has to be emphasized that the future committee meetings are open to everyone interested.

Regards, Paul.", "Paul Holik", "holik@sns.gov", "SMTP", "Paul Wright;Marion White;Weil@Bnl.Gov;Martin Stockli;Tom Shea;Richiedd@Ornl.Gov;Ted Hunter;Mike Hechler;Dave Gurd;Ray Fuja;Joe Error;George Dodson;Rudy Damm;Roy Cutler", "Paul Wright <wrightpa@ornl.gov>;Marion White <mwhite@sns.gov>; weil@bnl.gov;stockli@sns.gov;Tom Shea <shea@ornl.gov>; richiedd@ornl.gov;Ted Hunter <hunterwt@sns.gov>;Mike Hechler <hechlermp@ornl.gov>;gurd@sns.gov;Ray Fuja <rfuja@ornl.gov>;error@sns.gov;George Dodson <dodsong@ornl.gov>;Rudy Damm <dammr@ornl.gov>;Roy Cutler <cutlerri@sns.gov>", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "Ken Reece;David Olsen;Sam McKenzie;Frank Kornegay;Norbert Holtkamp", "Ken Reece <reece@sns.gov>;David Olsen <olsendk@email.cind.ornl.gov>;mckenzie@sns.gov;Frank Kornegay <kornegayfc@ornl.gov>;holtkamp@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP", , , , , , , "Normal" , , "Normal"
"RE: Electrical Safety Committee", "Hi, good morning Dave, Jackie will put this in the meeting minutes.
Regards, Paul.

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

From: Dave Gurd [mailto:gurd@sns.gov]
Sent: Tuesday, August 14, 2001 4:27 PM
To: Paul Holik
Subject: Re: Electrical Safety Committee

Hi Paul,

Suggest that you also announce (now that you can) that the next meeting will be on Monday, September 10, and be a round table discussion with Mike Thuot of LANL, who chaired the Electrical Safety Committee there that designed the electrical safety program that is now in force at LANL.

Dave

At 02:57 PM 8/14/01, you wrote:

>Dear all,
>
>it has been suggested during the last electrical committee meeting
>(01-08-09) that each group (i.e. RF, VAC, Controls, etc.) should have one
>designated electrical committee member, who will also have the
>responsibility and authority to serve as the electrical safety officer for
>that group. This certainly will establish more coherency in the electrical
>safety committee tasks.
>Nevertheless, it has to be emphasized that the future committee meetings are
>open to everyone interested.
>
>Regards, Paul.

Dave Gurd

Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

","Paul Holik","holik@sns.gov","SMTP","Dave
Gurd","gurd@sns.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"electrical safety committee meeting minutes",
Morning Jackie,

would you please add to the electrical safety meeting minutes that the next meeting is planned for Monday, 10 September, 2001, 1500, at RATS conference room.

Regards, Paul.", "Paul Holik", "holik@sns.gov", "SMTP", "Jackie B.
Smith", "smithjbl@sns.gov", "SMTP",,,,,,,,,,"Normal",,"Normal"
"RE: Electrical Safety Committee", "Dear Paul,

next meeting is scheduled for Monday, 10 September, 2001 at 1500 in the RATS conference room.

We will have a guest speaker from LANL advising about the LANL electrical safety committee conduct of business.

Welcome, and I look forward to cooperate with you.

Regards, Paul.

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

From: Paul Gibson [mailto:paulg@sns.gov]
Sent: Tuesday, August 14, 2001 3:44 PM
To: Paul Holik
Subject: Electrical Safety Committee

Mr. Holik;

It is with great pride and anticipation that I offer myself as the designated Electrical Committee Member for the Front End Group on said committee. (so says my boss anyway)
Please keep me apprised of meetings and such.

Thank you;

Paul Gibson
Spallation Neutron Source Project

701 Scarboro Road
Room 306
Oak Ridge, TN 37930
ph# (865)574-3594
", "Paul Holik", "holik@sns.gov", "SMTP", "Paul
Gibson", "paulg@sns.gov", "SMTP", "Normal", "Normal"
"Electrical Safety Committee", "Mr. Holik;

It is with great pride and anticipation that
I offer myself as the designated Electrical
Committee Member for the Front End Group on
said committee. (so says my boss anyway)
Please keep me apprised of meetings and such.

Thank you;

Paul Gibson
Spallation Neutron Source Project
701 Scarboro Road
Room 306
Oak Ridge, TN 37930
ph# (865)574-3594
", "Paul Gibson", "paulg@sns.gov", "SMTP", "Paul
Holik", "holik@sns.gov", "SMTP", "Normal"
"Re: Electrical Safety Committee", "Hi Paul,

Suggest that you also announce (now that you can) that the next
meeting will be on Monday, September 10, and be a round table discussion
with Mike Thuot of LANL, who chaired the Electrical Safety Committee there
that designed the electrical safety program that is now in force at LANL.

Dave

At 02:57 PM 8/14/01, you wrote:

>Dear all,
>
>it has been suggested during the last electrical committee meeting
>(01-08-09) that each group (i.e. RF, VAC, Controls, etc.) should have one
>designated electrical committee member, who will also have the
>responsibility and authority to serve as the electrical safety officer for
>that group. This certainly will establish more coherency in the electrical
>safety committee tasks.
>Nevertheless, it has to be emphasized that the future committee meetings are
>open to everyone interested.
>
>Regards, Paul.

Dave Gurd
Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

","Dave Gurd","gurd@sns.gov","SMTP","Paul Holik","holik@sns.gov","SMTP"
"RE: Electrical Safety Committee","Dave,
if Muriel is doing the minutes, I certainly appreciate that, and if needed, I
should be able to help to deepen the agony.
Regards, Paul.

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

From: Dave Gurd [mailto:gurd@sns.gov]
Sent: Wednesday, August 15, 2001 9:08 AM
To: Paul Holik
Subject: RE: Electrical Safety Committee

Is Jackie doing the minutes, or Muriel? I think Muriel has been agonizing
over how to make something of the tape she took.

Dave

At 08:08 AM 8/15/01, you wrote:

>Hi, good morning Dave,
>Jackie will put this in the meeting minutes.
>Regards, Paul.
>

>-----Original Message-----

>From: Dave Gurd [mailto:gurd@sns.gov]
>Sent: Tuesday, August 14, 2001 4:27 PM
>To: Paul Holik
>Subject: Re: Electrical Safety Committee
>

>Hi Paul,

>
> Suggest that you also announce (now that you can) that the next
>meeting will be on Monday, September 10, and be a round table discussion
>with Mike Thuot of LANL, who chaired the Electrical Safety Committee there
>that designed the electrical safety program that is now in force at LANL.
>

>Dave

>
>
>
>

>At 02:57 PM 8/14/01, you wrote:

> >Dear all,
> >
> >it has been suggested during the last electrical committee meeting
> >(01-08-09) that each group (i.e. RF, VAC, Controls, etc.) should have one
> >designated electrical committee member, who will also have the
> >responsibility and authority to serve as the electrical safety officer for
> >that group. This certainly will establish more coherency in the electrical
> >safety committee tasks.
> >Nevertheless, it has to be emphasized that the future committee meetings
>are
> >open to everyone interested.
> >
> >Regards, Paul.

>
>Dave Gurd
>Controls Group
>Accelerator Systems Division, MS 6473
>Spallation Neutron Source
>701 Scarboro Road
>Oak Ridge, TN, 37831
>
>Phone: (865) 241-6747
>Fax: (865) 241-6739
>Sectry:(865) 241-6339 (Muriel)
>
>gurd@sns.gov
>
>eFax: (501) 423-6167*
> *Faxes sent to this number
> arrive by email and I can
> pick up anywhere.

Dave Gurd
Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

","Paul Holik","holik@sns.gov","SMTP","Dave
Gurd","gurd@sns.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"RE: Electrical Safety Committee","Is Jackie doing the minutes, or Muriel? I
think Muriel has been agonizing
over how to make something of the tape she took.

Dave

At 08:08 AM 8/15/01, you wrote:

>Hi, good morning Dave,
>Jackie will put this in the meeting minutes.
>Regards, Paul.

>

>-----Original Message-----

>From: Dave Gurd [mailto:gurd@sns.gov]
>Sent: Tuesday, August 14, 2001 4:27 PM
>To: Paul Holik
>Subject: Re: Electrical Safety Committee

>

>

>Hi Paul,

>

> Suggest that you also announce (now that you can) that the next
>meeting will be on Monday, September 10, and be a round table discussion
>with Mike Thuot of LANL, who chaired the Electrical Safety Committee there
>that designed the electrical safety program that is now in force at LANL.

>

>Dave

>

>

>

>

>At 02:57 PM 8/14/01, you wrote:

> >Dear all,

> >

> >it has been suggested during the last electrical committee meeting
> >(01-08-09) that each group (i.e. RF, VAC, Controls, etc.) should have one
> >designated electrical committee member, who will also have the
> >responsibility and authority to serve as the electrical safety officer for
> >that group. This certainly will establish more coherency in the electrical
> >safety committee tasks.

> >Nevertheless, it has to be emphasized that the future committee meetings
>are

> >open to everyone interested.

> >

> >Regards, Paul.

>

>Dave Gurd

>Controls Group

>Accelerator Systems Division, MS 6473

>Spallation Neutron Source

>701 Scarboro Road

>Oak Ridge, TN, 37831

>

>Phone: (865) 241-6747

>Fax: (865) 241-6739

>Sectry:(865) 241-6339 (Muriel)

>

>gurd@sns.gov

>

>eFax: (501) 423-6167*

> *Faxes sent to this number
> arrive by email and I can
> pick up anywhere.

Dave Gurd
Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

","Dave Gurd","gurd@sns.gov","SMTP","Paul Holik","holik@sns.gov","SMTP"
"RE: safety meeting minutes","Hello Muriel,

here is the attachment back. The only think is to correct Graybar to Grayboy &
Associates teach.

Regards, Paul.

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

From: Muriel Tate [mailto:tatemc@ornl.gov]
Sent: Friday, August 17, 2001 9:39 AM
To: holik@ornl.gov
Cc: smithjbl@email.cind.ornl.gov
Subject: safety meeting minutes

Paul,

"Finally", here are the minutes. You may edit however you see fit. Sorry
it took so long. You may send back to me and I will send to everyone like
Jackie has always done it after I get your approval.

Have a good weekend.
Muriel

Muriel C. Tate (tatemc@ornl.gov)
SNS Controls and Accelerator Physics Groups
701 Scarboro, Rm 319
Telephone 241-6339
Fax 241-6739

","Paul Holik","holik@sns.gov","SMTP","Muriel
Tate","tatemc@ornl.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"safety meeting minutes","Paul,
"Finally", here are the minutes. You may edit however you see fit. Sorry

it took so long. You may send back to me and I will send to everyone like Jackie has always done it after I get your approval.

Have a good weekend.
Muriel

Muriel C. Tate (tatemc@ornl.gov)
SNS Controls and Accelerator Physics Groups
701 Scarboro, Rm 319
Telephone 241-6339
Fax 241-6739

", "Muriel
Tate", "tatemc@ornl.gov", "SMTP", "holik@ornl.gov", "holik@ornl.gov", "SMTP", "smithjb1@email.cind.ornl.gov", "smithjb1@email.cind.ornl.gov", "SMTP"
"safety meeting minutes", "Paul,
"Finally", here are the minutes. You may edit however you see fit. Sorry it took so long. You may send back to me and I will send to everyone like Jackie has always done it after I get your approval.

Have a good weekend.
Muriel

Muriel C. Tate (tatemc@ornl.gov)
SNS Controls and Accelerator Physics Groups
701 Scarboro, Rm 319
Telephone 241-6339
Fax 241-6739

", "Muriel
Tate", "tatemc@ornl.gov", "SMTP", "holik@ornl.gov", "holik@ornl.gov", "SMTP", "smithjb1@email.cind.ornl.gov", "smithjb1@email.cind.ornl.gov", "SMTP"
"Re: Electrical Safety Committee", "Hi Paul,
I will be glad to serve in that capacity representing the cryo group. Thanks for the opportunity.

As Always Don

At 02:57 PM 8/14/01 -0400, you wrote:

>Dear all,

>

>it has been suggested during the last electrical committee meeting
>(01-08-09) that each group (i.e. RF, VAC, Controls, etc.) should have one
>designated electrical committee member, who will also have the
>responsibility and authority to serve as the electrical safety officer for
>that group. This certainly will establish more coherency in the electrical
>safety committee tasks.

>Nevertheless, it has to be emphasized that the future committee meetings are
>open to everyone interested.

>

>Regards, Paul.

Don Richied
Senior Staff:
Spallation Neutron Source
Accelerator Group

701 Scarboro RD., MS-6473
Oak Ridge TN, 37831-8218
Email: richiedd@sns.gov
Voice:865.241.6825
Fax:865.241.6739

", "Donald Richied", "rzd@ornl.gov", "SMTP", "Paul Holik", "holik@sns.gov", "SMTP", "File General", "richiedd@sns.gov", "SMTP" "Fwd: UL Training Program", "Please read below correspondence from UL's Richard Charuhas. The email and attachment includes the information on the training that UL has done for LLNL on inspecting non-NRTL equipment. This class could be based on equipment that is presently being made for the SNS project as part of the class assessment. Is there any interest in pursuing this?

Kevin

>Date: Thu, 09 Aug 2001 14:28:34 -0500
>From: Richard.Charuhas@us.ul.com
>Subject: UL Training Program
>To: norriskp@ornl.gov
>Cc: John.R.Kovacik@us.ul.com

>
>
>

>Good afternoon, Kevin.

>

>Thanks for your 08 August e-mail. John Kovacik shared it with me yesterday morning. Both John and I enjoyed speaking with you, however briefly, at the end of last week's DOE Electrical Safety Meeting at PPPL. And we very much appreciate your interest in having UL create and deliver a course for ORNL similar to what we are currently doing at LLNL for their Program AHJ Field Representatives. That course is entitled Evaluating the Electrical Safety of Unlisted and Modified Listed Electrical Equipment.

>

>Keep in mind that our LLNL course is actually the last two days of a five-day program. As you may recall from Keith Gershon's presentation last Thursday afternoon, the first three days are taught by LLNL and cover a number of useful topics ranging from Program Scope and Functions to NFPA 70. All together they provide the background necessary for the students to get the most out of their two days with us. The UL course focuses on how to actually perform what we call a Level One Electrical Safety Inspection, which is a comprehensive, LLNL checklist-driven, primarily visual product evaluation that involves no testing. Testing, such as UL's field tests for dielectric strength, input ratings, and leakage current, would take us to Level Two. At least for now, LLNL's AHJ field reps do not do their own testing; however, they may require that certain testing be done and that the results be provided to them for review.

>

>Leading up to our three instructor-led and four student-led electrical safety evaluations we have a morning to discuss the full scope of a Level One inspection (what it is and what it is not) and explain how to use selected UL Standards for Safety as resources when preparing to conduct these inspections. LLNL chose three Standards for their course: UL 508, UL

>508A, and IEC 61010-1/UL 3101-1. LLNL also selected the seven different
>equipments being used in the hands-on part of the class. These range in
>complexity from a commercially available (but unListed) overhead projector
>to a plasma pulse generator from the NIF. Modeling an Oak Ridge class on
>Lawrence Livermore's, we would work with you to select some representative
>UL Standards that would be useful to you (508 and 508A are excellent
>choices) and to establish a protocol that your folks will use when doing
>their Level One evaluations (re: LLNL's checklist). Your main task will be
>to identify the various ORNL equipments that will be inspected during each
>class. At Lawrence Livermore we use the same seven items every time the
>class is given.

>
>Our LLNL course is based on the outline of a UL seminar/workshop designed
>to train our own engineering staff in hazard-based safety analysis and how
>to do field evaluations. In February 2000 I provided this outline to LLNL,
>asking that Keith and company treat it as a menu and select from the topics
>listed those that they wanted us to include in the course we were going to
>customize for them. We then worked with LLNL to establish the level of
>detail desired for these topics and identify other subjects to be included
>in the course, such as the module on Standards and a brief discussion of
>Europe's CE Marking and what one can learn from a Declaration of
>Conformity. For your course we'll begin with the outline of a UL internal
>course aimed particularly at electrical safety. Here's a copy for you.

>
>(See attached file: Course Outline.doc)

>
>A few words about the course materials. At LLNL we provided a reference
>copy of the course instructor guide, student notetaking guide, and student
>"preread" manual which represents the background information that each
>equipment's owner would provide the field representative in advance of the
>actual inspection. These LLNL documents include wiring schematics, user
>instructions, and so forth. Then, of course, each student gets his or her
>own copies of the two student books. Additionally, we provided LLNL with
>one master copy each of the three UL Standards. LLNL then reproduced these
>in quantity to give each student a set to use in class and keep afterwards.
>Lastly, we provide the materials needed by the students to document the
>results of their in-class equipment inspections. Essentially equivalent to
>a final exam, these are turned in at the end of the course and retained by
>LLNL as part of the records required by the University of California.

>
>I hope the information above gives you a more complete picture of what UL
>is doing with LLNL and a better idea about what we could do for you. As
>soon as you can let me know more specifically what you would like UL's ORNL
>course to cover and when (and where) you would have us deliver it, I'll be
>pleased to give you a cost quotation. Our quote for LLNL included a site
>visit to discuss course particulars and examine/photograph the electrical
>equipment (and related documentation) to be used in the course. Digital
>photography is incorporated into the presentation. Also included were last
>September's pilot and the three courses to be delivered this fiscal year,
>the last of which is next week.

>
>I look forward to hearing from you, Kevin. In the meantime, should you
>have any questions or want to discuss any aspect of this, please don't
>hesitate to give me a call.

>
>Best regards,

>

testing or positioning are not possible."

Fourth bullet: Replace "all" with "only those devices necessary to successfully test or position the equipment".

Section 8: Add or after each bulleted item except the last.

David Anderson

Sam McKenzie wrote:

> Here is the Lock Out-Tag Out document as promised.
>
> http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf
>
> I am also including the general page with applicable SNS procedures (both
> ORNL and project specific):
>
> <http://www-internal.sns.gov/esh/standards/standards.htm>
>
> Take Care
>
> Samuel P. McKenzie
> Accelerator Systems Division
> Spallation Neutron Source
> 701 Scarboro Rd.
> Oak Ridge, TN 37830-6473
> (865)241-8054

","David E. Anderson","deanderson@sns.gov","SMTP","Sam McKenzie","mckenziesp@sns.gov","SMTP","holik@email.cind.ornl.gov;deanderson@email.cind.ornl.gov;gurd@lanl.gov;sfisher@email.cind.ornl.gov;hicksjd@email.cind.ornl.gov","holik@email.cind.ornl.gov;deanderson@email.cind.ornl.gov;gurd@lanl.gov;sfisher@email.cind.ornl.gov;hicksjd@email.cind.ornl.gov","SMTP;SMTP;SMTP;SMTP;SMTP"

"Electrical Safety Committee Meeting","Distribution:

Attached are the Electrical Safety Committee Meeting minutes from 8/9/01. Pls note that the next meeting is scheduled for Monday, September 10 at 3:00pm in the RATS building conference room.

Don Smith: Pls write in this meeting on the board outside the conference room and I'll dance at your next wedding!!!!

Muriel: A big thanks for taking notes for me - you are great!!

Tks,

Jackie

","Jackie B.

Smith","smithjb1@sns.gov","SMTP","deanderson@sns.gov;gurd@sns.gov;sfisher@sns.gov;hicksjd@sns.gov;holik@sns.gov;mckenziesp@sns.gov","deanderson@sns.gov;gurd@sns.gov;sfisher@sns.gov;hicksjd@sns.gov;holik@sns.gov;mckenziesp@sns.gov","SMTP;SMTP;SMTP;SMTP;SMTP","mwhite@sns.gov;smithdw2@sns.gov;tatemc@sns.gov","mwhite@sns.gov;smithdw2@sns.gov;tatemc@sns.gov","SMTP;SMTP;SMTP"

"RE: Electrical Safety - this afternoon at 3:00PM - RATS Bldg","Hello Dave,

thanks for the reminder. You have beaten me by few seconds, so I am not sending anything out.

paul.

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

From: Dave Gurd [mailto:gurd@sns.gov]
Sent: Monday, September 10, 2001 1:58 PM
To: deanderson@sns.gov; gurd@sns.gov; sfisher@sns.gov; hicksjd@sns.gov; holik@sns.gov; mckenzie@sp@sns.gov; mwhite@ornl.gov; dammr@ornl.gov
Cc: Frank Kornegay; Bill DeVan; sibley@sns.gov; cutlerri@sns.gov; roy.cutler@worldnet.att.net; hstrong@ornl.gov; hstrong@ornl.gov; hunterwt@sns.gov; Ray Fuja; stonewcjr@sns.gov; wrightpa@ornl.gov; Martin Stockli; ernesto@sns.gov
Subject: Electrical Safety - this afternoon at 3:00PM - RATS Bldg

Just another reminder. Remember also that anyone can attend. Many people will be working with or around electrical equipment, and our policies in this area will affect them all.

Electrical Safety Committee Members,

Please recall that the agenda for the Electrical Safety Committee will be a discussion with Mike Thuot of Los Alamos, who set the current program for electrical safety there, and who has been involved with implementing, assessing and modifying that program. He wants to talk to the committee informally, and answer questions. In my opinion, Mike did an outstanding job of this at Los Alamos - motivated always by common sense over compliance. I hope everyone can attend to benefit from his experience.

Remember that these meetings are open. Please invite anyone who you think is (or should be) interested.

Monday, September 10 at 3:00PM. RATS Building

Dave

Dave Gurd
Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

","Paul Holik","holik@sns.gov","SMTP","Dave Gurd","gurd@sns.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"RE: Electrical Safety - this afternoon at 3:00PM - RATS Bldg","Hi Paul,

Sorry for pre-empting you. But Mike was in my office so I was reminded. I am hoping we can overflow the room.

Could you introduce at least the committee members at the meeting? I am not sure of everyone's name. Thanks.

Dave

At 02:04 PM 9/10/01, you wrote:

>Hello Dave,

>

>thanks for the reminder. You have beaten me by few seconds, so I am not
>sending anything out.

>

>paul.

>

>-----Original Message-----

>From: Dave Gurd [mailto:gurd@sns.gov]

>Sent: Monday, September 10, 2001 1:58 PM

>To: deanderson@sns.gov; gurd@sns.gov; sfisher@sns.gov; hicksjd@sns.gov;

>holik@sns.gov; mckenzie@sns.gov; mwhite@ornl.gov; dammr@ornl.gov

>Cc: Frank Kornegay; Bill DeVan; sibley@sns.gov; cutlerri@sns.gov;

>roy.cutler@worldnet.att.net; hstrong@ornl.gov; hstrong@ornl.gov;

>hunterwt@sns.gov; Ray Fuja; stonewcjr@sns.gov; wrightpa@ornl.gov; Martin

>Stockli; ernesto@sns.gov

>Subject: Electrical Safety - this afternoon at 3:00PM - RATS Bldg

>

>

>Just another reminder. Remember also that anyone can attend. Many people
>will be working with or around electrical equipment, and our policies in
>this area will affect them all.

>

>

>Electrical Safety Committee Members,

>

> Please recall that the agenda for the Electrical Safety Committee
>will be a discussion with Mike Thuot of Los Alamos, who set the current
>program for electrical safety there, and who has been involved with
>implementing, assessing and modifying that program. He wants to talk to
>the committee informally, and answer questions. In my opinion, Mike did an
>outstanding job of this at Los Alamos - motivated always by common sense
>over compliance. I hope everyone can attend to benefit from his experience.

> Remember that these meetings are open. Please invite anyone who
>you think is (or should be) interested.

>

> Monday, September 10 at 3:00PM. RATS Building

>

>Dave

>

>Dave Gurd

>Controls Group

>Accelerator Systems Division, MS 6473
>Spallation Neutron Source
>701 Scarboro Road
>Oak Ridge, TN, 37831
>
>Phone: (865) 241-6747
>Fax: (865) 241-6739
>Sectry:(865) 241-6339 (Muriel)
>
>gurd@sns.gov
>
>eFax: (501) 423-6167*
> *Faxes sent to this number
> arrive by email and I can
> pick up anywhere.

Dave Gurd
Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

", "Dave Gurd", "gurd@sns.gov", "SMTP", "Paul Holik", "holik@sns.gov", "SMTP"
"Fwd: Electrical Safety Committee Meeting", "I read the last meeting minutes from
8/9/01.

Here are my comments on some of the questions:

When the electrical switchyard is built by TVA
and the 13.8kV is tied in, this will become part
of the ORNL Electrical distribution system and
it will be operated/maintained by ORNL electricians
and linemen.

With the amount of equipment to be inspected,
a designated Electrical Safety Officer should be
appointed for each group. I agree it would
certainly be advantageous for these ESO's be
an integral part of the design process for the
equipment.

On the point of UL listing. Equipment is not
required to be UL listed; however, OSHA 1910.303(a)
states "The conductors and equipment required or
permitted by this subpart shall be acceptable only

if approved" Further reading "Suitability of equipment for an identified purpose may be evidenced by listing or labeling for that identified purpose.

OSHA 1910.399 Acceptable. An installation or equipment is acceptable to the Assistant Secretary of Labor,....
(i) If it is accepted, or certified, or listed, or labeled, or otherwise determined to be safe by a nationally recognized testing laboratory; or
(ii) Skip
(iii) With respect to custom-made equipment or related installations which are designed, fabricated for, and intended for use by a particular customer, if it is determined to be safe for its intended use by its manufacturer on the basis of test data which the employer keeps and makes available for inspection to the Assistant Secretary and his authorized representatives.

I sent correspondence previously about UL coming on-site and they will give an evaluation of some of the custom-built equipment. This would allow SNS to designate their own ESO's to evaluate equipment.

There was no specific UL training for the AHJ. I think this training is recommended. One requirement is to have passed the Electrical Inspector certification test given by the International Conference of Building Officials (ICBO). This test is based on the National Electrical Code.

AVO International, Dallas, Texas offers on-site training and training at their facilities in all areas of Electrical Safety. Currently ORNL does not have an electrical trainer on site.

I have included attachments provided by Keith Gershon of LLNL and how they inspect non-NRTL equipment. This is the way I suggest SNS evaluate custom built equipment.

Any comments would be appreciated.

Kevin

before. UL has updated the 2 day course. I would recommend this 2 day class for the SNS design team to evaluate and document non-NRTL equipment. Consider this information at the next meeting.

>Date: Wed, 10 Oct 2001 14:07:39 -0500
>From: Richard.Charuhas@us.ul.com
>Subject: UL Training Program Update
>To: norriskp@ornl.gov

>

>

>Hi, Kevin.

>

>I am following up on my 08/09/01 email to you regarding the possibility of
>UL doing a seminar/workshop for Oak Ridge similar to the two-day course we
>did this past year with Lawrence Livermore. As you know, LLNL's inspectors
>currently do not do any product testing themselves, and you may certainly
>decide to take that same approach. However, if you are considering having
>your folks perform one or more tests of their own, I thought it would be
>useful for you to see what tests UL engineers typically do in the field and
>the types of equipment those tests require.

>

>To that end I have expanded the outline that I sent you previously,
>identifying a dozen UL field tests and listing the tools, etc. that can
>find their way into a UL Field Evaluation Travel Kit. I suggest you shred
>that older outline and use the one attached below instead. Check out parts
>V and VI in particular.

>

>(See attached file: Course Outline.doc)

>

>Whenever you're ready to proceed further, just send me a marked-up version
>of this outline, indicating your preferences regarding course content. If
>you want us to model your course more on LLNL's, please include the number
>of instructor-led and student-performed in-class equipment inspections
>you'd like, plus which UL Standards you want the course to cover as
>resources for your program. Also let me know how many classes you're
>planning for FY02, roughly for what dates you envision scheduling them, how
>many students you anticipate being in each class, and where the classes
>will be held (I presume at ORNL.). I'll build your quote based on this
>information. In the meantime, please do call or email me if you have any
>questions or would like more details.

>

>Best regards,

>

>Rich

>

>Rich Charuhas

>Associate Manager

>UL Corporate Seminars

>Phone: (847) 664-2067

>Fax: (847) 509-6283

>Email: Richard.Charuhas@us.ul.com

>(See attached file: Course Outline.doc)

>*****@

>

>***** Internet E-mail Confidentiality Disclaimer *****

Dave Gurd
Controls Group
Accelerator Systems Division, MS 6473
Spallation Neutron Source
701 Scarboro Road
Oak Ridge, TN, 37831

Phone: (865) 241-6747
Fax: (865) 241-6739
Sectry:(865) 241-6339 (Muriel)

gurd@sns.gov

eFax: (501) 423-6167*
*Faxes sent to this number
arrive by email and I can
pick up anywhere.

","Dave Gurd","gurd@sns.gov","SMTP","Paul
Holik","holik@sns.gov","SMTP","stonewcjr@sns.gov;devanwr@sns.gov;wrightpa@ornl.g
ov;sibley@sns.gov","stonewcjr@sns.gov;devanwr@sns.gov;wrightpa@ornl.gov;sibley@s
ns.gov","SMTP;SMTP;SMTP;SMTP"
"FW: Electrical Equipment","Good morning Paul:

Attached are several files describing how the BNL CA-D (nee AGS) approves
electrical equipment; I would be curious to know your view on their approach
(e.g. too "heavy-handed", too lenient, just right, etc.).

Please read them over and let me know; okay ??

Thanks,

ken.

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

From: Lessard, Edward T [mailto:lessard@bnl.gov]
Sent: Thursday, October 18, 2001 9:11 AM
To: 'holik@sns.gov'
Cc: Sandberg, Jon N; Ken Reece (E-mail)
Subject: Electrical Equipment

Hi:

Attached is the OPM on how we designate approved equipment (9.3.4). Jon
Sandberg can fill you in on how it has been implemented. Also, I am
attaching a design standard that we use for electrical equipment. In
addition, I include the very formal Chief Engineers certification of devices
that is used mostly by the Chief Mechanical Engineer but on occasion has
been used by the CEE (9.2.3 plus a and b).

Ed

<<09-03-04.pdf>> <<ElecSafStd.pdf>> <<09-02-03.pdf>> <<9-2-3-a.pdf>>
<<9-2-3-a.pdf>>

", "Ken Reece", "oyv@sns.gov", "SMTP", "Paul Holik", "holik@ornl.gov", "SMTP", , , , , , , , "Normal" "FW: Two Possible Reviews", "

Hi:

I also thought you might want to see how we approach a review. The second example below is best. Our hazard screening tool is at <http://www.rhichome.bnl.gov/AGS/Accel/SND/C-AHazardTool/screen.html>

Ed

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

From: Glenn, Joseph W
Sent: Wednesday, October 17, 2001 6:07 PM
To: Glenn, Joseph W; alessil@bnl.gov; Cirnigliaro, Peter P; Cullen, James R; etkinl@bnl.gov; Feng, Pei Kuan; pfi@bnl.gov; Karol, Raymond C; Lang, Paul A; Lessard, Edward T; levesqul@bnl.gov; McIntyre, Gary T; Monahan, Terence G; Peters, John; Phillips, David B; Sandberg, Jon N; Schaefer, Charles W; Scott, Joel; Tuozzolo, Joseph E; Wu, Kuo-chen; pkelley@mail.bnl.gov
Cc: Dressler, Olaf
Subject: Two Possible Reviews

Gentles all -

There two projects that we may have to review. The first is the addition of 0-1' of dirt over the HITL [TtB] line near where it crosses under Center St. The attached 'Hazard Ident tool' output [TTB1-3.pdf, attached] indicates no hazard, and I agree. if anyone wants more information contact the engineer Ali Javidfar; then contact me if you feel a review is necessary.

The second is a pulsed PS for an air core quad to be used for beam tests in RHIC. The discription can be found in the CA tech note C-A/AR/60 @: http://www.agshome.bnl.gov/AP/ap_notes/ap_note_60.pdf
The hazard tool info is in atachments QUAD1 & 2.pdf. With the 2 KV 50 mA supply, I think there needs be at least a review to look at the 'encasement' of the HV equipment - C-A 'compliant' or 'code equivelant'. The Chief EE can certify this. For more information contact Olaf Dressler. Committee members want a further review, please contact me.

Thank you for your time on this comeiitttee -

Woody

", "Lessard, Edward
T", "lessard@bnl.gov", "SMTP", "'holik@sns.gov'", "holik@sns.gov", "SMTP" "Electrical Equipment", "Hi:

Attached is the OPM on how we designate approved equipment (9.3.4). Jon Sandberg can fill you in on how it has been implemented. Also, I am attaching a design standard that we use for electrical equipment. In addition, I include the very formal Chief Engineers certification of devices that is used mostly by the Chief Mechanical Engineer but on occasion has

been used by the CEE (9.2.3 plus a and b).

Ed

<<09-03-04.pdf>> <<ElecSafStd.pdf>> <<09-02-03.pdf>> <<9-2-3-a.pdf>>
<<9-2-3-a.pdf>>

", "Lessard, Edward
T", "lessard@bnl.gov", "SMTP", "'holik@sns.gov'", "holik@sns.gov", "SMTP", "Sandberg,
Jon N;Ken Reece (E-mail)", "jsandberg@bnl.gov;reece@ornl.gov", "SMTP;SMTP"
"Equipment Approval process", "Dear All,
in the attachment you will find some background for the OSHA and DOE mandated
electrical approval process and also my suggestions how to implement this
process. Suggestions are based on OSHA, DOE and subsequently LANL and BNL
guidelines.

Comments are being solicited.

Paul ", "Paul Holik", "holik@sns.gov", "SMTP", "Paul Gibson;David E.
Anderson;William E Barnett;Ronald E Battle;John Crandall;Roy Cutler;George
Dodson;Scott Fisher;Ray Fuja;Dave Gurd;Mike Hechler;Ted Hunter;Sam McKenzie;Tom
Owens;Richiedd@Ornl.Gov;Ken Rust;Tom Shea;Coles Sibley;Martin Stockli;William
Stone;Dan Stout;J.G. Wang;Ted Hunter;Ron
Cornwell", "paulg@sns.gov;deanderson@ornl.gov;barnettwejr@sns.gov;battlere@sns.go
v;crandall@sns.gov;Roy Cutler <cutlerri@sns.gov>;George Dodson
<dodsong@ornl.gov>;sfisher@sns.gov;Ray Fuja <rfuja@ornl.gov>;gurd@sns.gov;Mike
Hechler <hechlermp@ornl.gov>;Ted Hunter
<hunterwt@sns.gov>;mckenzie@sp@sns.gov;owenstl@sns.gov;
richiedd@ornl.gov;rustkr@sns.gov;Tom Shea <shea@ornl.gov>;Coles Sibley
<sibley@sns.gov> ;stockli@sns.gov;stonewcjr@sns.gov;danstout@sns.gov;J.G. Wang
<jgwang@sns.gov>;Ted Hunter
<hunterwt@sns.gov>;cornwellrj@ornl.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP
;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP
", "Norbert Holtkamp;Frank Kornegay;Tom Mann;David Olsen;Ken Reece;Marion
White;Rudy Damm", "holtkamp@sns.gov;Frank Kornegay
<kornegayfc@ornl.gov>;manntljr@sns.gov;David Olsen
<olsendk@email.cind.ornl.gov>;Ken Reece <reece@sns.gov>;Marion White
<mwhite@sns.gov>;Rudy Damm
<dammr@ornl.gov>", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", , , , , , "Normal", , "Normal"
"Electrical Safety Committee Meeting", "Distribution:

This is a reminder that there will be an Electrical Safety Committee Meeting (ESCM) on Monday, October 15 at 3:00pm in the RATS building conference room. Pls plan to attend.

If I have omitted someone that should have received this e-mail, pls forward for me.

Tks,
Jackie

Jackie Smith
SNS Project Office
701 Scarboro Road Room 323
Phone 865 241-8056
Fax 865 241-9831

","Jackie B.
Smith", "smithjbl@sns.gov", "SMTP", "deanderson@sns.gov; crandall@sns.gov; sfisher@sns.gov; hicksjd@sns.gov; holik@sns.gov; dodsong@sns.gov; norriskp@ornl.gov; ballja@sns.gov; rustkr@ornl.gov; hunterwt@ornl.gov; devanwr@ornl.gov; rfuja@sns.gov; battlere@ornl.gov; woodrj@ornl.gov; paulg@sns.gov; richiedd@sns.gov", "deanderson@sns.gov; crandall@sns.gov; sfisher@sns.gov; hicksjd@sns.gov; holik@sns.gov; dodsong@sns.gov; norriskp@ornl.gov; ballja@sns.gov; rustkr@ornl.gov; hunterwt@ornl.gov; devanwr@ornl.gov; rfuja@sns.gov; battlere@ornl.gov; woodrj@ornl.gov; paulg@sns.gov; richiedd@sns.gov", "SMTP; SMTP; SMTP", "mwhite@sns.gov; mckenzie@ornl.gov; kornegayfc@sns.gov; holtkamp@sns.gov; gurd@sns.gov; dammr@sns.gov; brockdml@sns.gov; wrightpa@sns.gov; reece@sns.gov; tatemc@sns.gov; cornwellrj@ornl.gov; smithdw2@sns.gov; whedbee@ornl.gov; brucece@ornl.gov", "mwhite@sns.gov; mckenzie@ornl.gov; kornegayfc@sns.gov; holtkamp@sns.gov; gurd@sns.gov; dammr@sns.gov; brockdml@sns.gov; wrightpa@sns.gov; reece@sns.gov; tatemc@sns.gov; cornwellrj@ornl.gov; smithdw2@sns.gov; whedbee@ornl.gov; brucece@ornl.gov", "SMTP; SMTP; SMTP", "SNS Electrical Equipment Approval", "Hello Kevin,

with the present, I would like to start a dialogue with you about SNS electrical equipment.

In the attachment you will find a memorandum regarding electrical equipment approval process and SNS management has agreed to the equipment approval process as described in this memorandum.

I would like to meet with you and discuss the entire process of SNS coming on line, i.e. your involvement as AHJ in CF and ASD AC primary distribution and subsequent accelerator component installation, if any.

Regards, Paul", "Paul Holik", "holik@sns.gov", "SMTP", "Kevin Norris [norriskp@ornl.gov]", "norriskp@ornl.gov", "SMTP", "Normal", "Normal", "Electrical equipment approval", "Dear all,

this is to put in writing the guideline for electrical equipment acceptance as required by 29 CFR

1910 S, which has been referred to in our last installation meeting, and FELK meeting.

General requirements 1910.303

a) approval

b) Examination, installation, and use of equipment

1) Examination. Electrical equipment shall be free from recognized hazards that are likely to cause death or serious physical harm to employees. Safety of equipment shall be determined using the following considerations:

(i) Suitability for installation and use in conformity with the provisions of this subpart.

Suitability of equipment for an identified purpose may be evidenced by listing or labeling for that identified purpose.

(ii) Mechanical strength and durability, including for parts designed to enclose and protect other equipment, the adequacy of the protection thus provided.

(iii) Electrical insulation.

(iv) Heating effects under condition of use.

(v) Arcing effects.

(vi) Classification by type, size, voltage, current capacity, specific use.

(vii) Other factors which contribute to the practical safeguarding of employees using or likely come in contact with the equipment.

.

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Monday, November 19, 2001 9:58 AM
To: holik@email.cind.ornl.gov
Cc: mckenziesp@email.cind.ornl.gov
Subject: Fwd: Electrical training

Paul,

Here are a couple of examples of training that Don has found. You and the committee need to review these and determine if you want something like these and what needs to be changed in them. You will not only have to determine what needs to be changed but also how to change it.

Ron

Date: Mon, 19 Nov 2001 09:32:46 -0500
From: Don Creekmore <wnc@ornl.gov>
Subject: Electrical training
To: cornwellrj@ornl.gov

Ron,

Here are some preliminary sites for you to look at. The first two are web-based training courses that we might adapt. The third is information that could be used to create lesson materials. I am still looking for information on pulsed power. That might be the hardest to find.

Web-based training that is available from LLNL. I have not contacted the folks, but this is where we got access to the high voltage for researchers training information so I don't think it would be a problem to get their permission to use/adapt to our site.

<http://www-training.llnl.gov/wbt/hc/NonIonizing/NonIonizing.html>

<http://www-training.llnl.gov/wbt/hc/Capacitor/Capacitor.html>

EMF information that could be used to develop training materials/lessons.
<http://www.niehs.nih.gov/emfrapid/html/Q&A-Workplace.html?>

I will be sending you some additional information shortly, I hope.

Don

++++
Don Creekmore
ORNL Office of Training Services
Building 2661, MS-6425
Phone: 865-241-2435
Fax: 865-241-2813

It's kind of fun to do the impossible.

-- Walt Disney

It is wonderful to be in on the creation of something, see it used,
and then walk away and smile at it.

-- Lady Bird Johnson

Thanks,
Ron Cornwell, CIH
(576-4309)

","Paul Holik","holik@sns.gov","SMTP","Ron
Cornwell","cornwellrj@ornl.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"Job Hazard Analysis","All :
Here is the initial JHA for the Shop.
I'm open to suggestions.
Wm.

--

William Barnett
A.S.D. Electrical Systems
Oak Ridge National Lab
115 Union Valley Rd. MS6471
Oak Ridge Tn. 37831-6471

(865) 574-1866 ph.
(865) 873-7657 pg.
(865) 574-0676 fax

barnettwejr@ornl.gov

","william barnett","barnettwejr@ornl.gov","SMTP","Roy
Cutler","cutlerri@sns.gov","SMTP","Kenneth
Rust;holik@ornl.gov;toomeytl@ornl.gov;Scott M.Fisher;william
barnett","rustkr@sns.gov;holik@ornl.gov;toomeytl@ornl.gov;sfisher@ornl.gov;barne
ttwejr@ornl.gov","SMTP;SMTP;SMTP;SMTP;SMTP"
"Electrical Safety Committee Meeting 2001-12-03","Electrical Safety Committee
Meeting 2001-12-03
Present: David Anderson RF, Peter Ladd VAC, John Crandall VAC, Ken Reece ASD,
Scott Fisher PS, George Dodson OPS, Ron Cornwell ES&H, Paul Holik PS (chair)

Approval of Electrical Equipment form was presented for comments and
corrections. The form now will be available on SNS WEB and shortly approved for
as SNS document and also in Paul Holik's folder on the network.
Electrical Safety Officers for each group are charged with the responsibility to
keep documentation for acceptance of electrical equipment and perform the
necessary checks on non-listed electrical equipment according to this form. See
guidance in 29CFR1910S, copy of which were distributed to ESO's. (I still have
copies for interested parties).
The question of qualifications of ESO was discussed with the conclusion that
with the help of SNS management, the electrical safety committee along with SUNS
ASH will organize a training - seminar for ESP's as soon as possible.
David Anderson to contact LAN and inquire about availability of appropriate
lecturer.
Ron Cornwell addressed the available training on WEB. GO training on Face base
SNS ES&H has basic electrical safety, which should be made mandatory for all ASD

","Paul Holik","holik@sns.gov","SMTP","Frank Kornegay","fck@ornl.gov","SMTP","William Stone;David E. Anderson;Ronald E Battle;John Crandall;Scott Fisher;Paul Gibson;Richiedd@Ornl.Gov","stonewcjr@sns.gov;deanderson@ornl.gov;battlere@sns.gov;crandall@sns.gov;sfisher@sns.gov;paulg@sns.gov;richiedd@ornl.gov","SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP",,,,,,,,,,"Normal",,"Normal" "RE: A question","The answer is no, and I certainly am seeking your advice in that respect.

Paul

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

From: Frank Kornegay [mailto:fck@ornl.gov]
Sent: Tuesday, December 11, 2001 9:07 AM
To: Paul Holik
Subject: RE: A question

Thanks, Paul!!!

And another thing - does your Committee have a Charter? If so, can you send me a copy for my files?

Thanks again!!!

frank

At 08:38 AM 12/11/01 -0500, you wrote:

>Hello Frank,
>here are the committee members:
>
>David Anderson - RF group
>Ron Battle - Target group
>John Crandall - Vacuum group
>Bill Stone - Controls group
>Scott Fisher - Electrical / Power Supply group
>Paul Gibson - Ion Source
>Don Richied - Cryogenics group
>Paul Holik - Electrical group (chairman)

>
>It was agreed that the committee members will also act as Electrical Safety
>Officers for their group, i.e., be responsible for non listed electrical
>equipment approval process, electrical safety and aid their group leaders in
>selecting pertinent electrical training and seminars.

>
>Regards, Paul.

>
>-----Original Message-----
>From: Frank Kornegay [mailto:fck@ornl.gov]
>Sent: Monday, December 10, 2001 3:26 PM
>To: Paul Holik
>Subject: A question

>
>
>Paul, sir:
>

>Dear all,
>
>for those of you who missed the Electrical Committee meeting on Monday the
>12th, and want to have the advertised copy of 29CFR1910S stop in my office
>to get it.
>
>Regards, Paul

", "Bill Stone", "stonewcjr@sns.gov", "SMTP", "Paul Holik", "holik@sns.gov", "SMTP"
"Fwd: Electrical training", "Paul,
Here are a couple of examples of training that Don has found. You and the
committee need to review these and determine if you want something like
these and what needs to be changed in them. You will not only have to
determine what needs to be changed but also how to change it.
Ron

>Date: Mon, 19 Nov 2001 09:32:46 -0500
>From: Don Creekmore <wnc@ornl.gov>
>Subject: Electrical training
>To: cornwellrj@ornl.gov

>
>
>Ron,
>

>Here are some preliminary sites for you to look at. The first two are
>web-based training courses that we might adapt. The third is information
>that could be used to create lesson materials. I am still looking for
>information on pulsed power. That might be the hardest to find.

>
>Web-based training that is available from LLNL. I have not contacted the
>folks, but this is where we got access to the high voltage for researchers
>training information so I don't think it would be a problem to get their
>permission to use/adapt to our site.

>
><http://www-training.llnl.gov/wbt/hc/NonIonizing/NonIonizing.html>
>
><http://www-training.llnl.gov/wbt/hc/Capacitor/Capacitor.html>

>
>
>EMF information that could be used to develop training materials/lessons.
><http://www.niehs.nih.gov/emfrapid/html/Q&A-Workplace.html>

>
>
>I will be sending you some additional information shortly, I hope.
>
>Don

>
>+++++
>Don Creekmore
>ORNL Office of Training Services
>Building 2661, MS-6425
>Phone: 865-241-2435
>Fax: 865-241-2813

>
>It's kind of fun to do the impossible.
>
>-- Walt Disney

>
>It is wonderful to be in on the creation of something, see it used,
>and then walk away and smile at it.
>
>-- Lady Bird Johnson
>

Thanks,
Ron Cornwell, CIH
(576-4309)
", "Ron
Cornwell", "cornwellrj@ornl.gov", "SMTP", "holik@email.cind.ornl.gov", "holik@email.
cind.ornl.gov", "SMTP", "mckenzieesp@email.cind.ornl.gov", "mckenzieesp@email.cind.or
nl.gov", "SMTP"
"Electrical Safety Committee Charter - Draft", "Hello Frank,

here in the attachment is a charter for Electrical Safety Committee,
conceptually based on the Radiation Safety Committee charter, for comments.

Regards, Paul", "Paul Holik", "holik@sns.gov", "SMTP", "Frank Kornegay", "Frank
Kornegay <kornegayfc@ornl.gov>", "SMTP", "David Olsen;Roy Cutler;Rudy Damm;Norbert
Holtkamp;Ken Reece;Marion White", "David Olsen <olsendk@email.cind.ornl.gov>;Roy
Cutler <cutlerri@sns.gov>;Rudy Damm <dammr@ornl.gov>;holtkamp@sns.gov;Ken Reece
<reece@sns.gov>;Marion White
<mwhite@sns.gov>", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "Normal", "Normal"
"Electrical Safety Committee charter-draft", "Hello all,

here in the attachment is a draft of ESC charter for comments.

Regards, Paul.", "Paul Holik", "holik@sns.gov", "SMTP", "Devanwr@Ornl.Gov;William
Stone;Richiedd@Ornl.Gov;Paul Gibson;David E. Anderson;Scott Fisher;John
Crandall;Ron Cornwell;Ronald E Battle", " devanwr@ornl.gov;stonewcjr@sns.gov;
richiedd@ornl.gov;paulg@sns.gov;deanderson@ornl.gov;sfisher@sns.gov;crandall@sns
.gov;cornwellrj@ornl.gov;battlere@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;S
MTP;SMTP", "Dan Stout;Sam McKenzie;Mario Giannella;George
Dodson", "danstout@sns.gov;mckenzieesp@sns.gov;giannella@sns.gov;George Dodson
<dodsong@ornl.gov>", "SMTP;SMTP;SMTP;SMTP", "Normal", "Normal"
"Fwd: Committee Charters", "

>Gentlemen:

>
>The charter for the Radiation Safety Committee is attached. This is
>undergoing some minor revision, but the comments of Thom, Carl, and lots
>of others have been received and incorporated.
>
>What I hope is clear is that the role of the RSC is advisory in nature,
>evaluating issues across the entire SNS. Implementing requirements is a
>LINE responsibility, and Committees generally are not good decision-making
>entities. This is one common thread that should be shared by all SNS
>Committees - establishing how best to implement requirements across the
>Project. We specifically required that Committees maintain records, and
>report to the ES&H Manager, with a requirement that the Senior Management
>respond to recommendations. I also specifically included the concept that
>a knowledgeable individual (in this case, the Radiation Safety Officer)
>can make short-term decisions without Committee involvement.
>

>Far from perfect, but perhaps useful. Sorry it took me so long.

>

>frank

", "Frank

Kornegay", "fck@ornl.gov", "SMTP", "holik@ornl.gov", "holik@ornl.gov", "SMTP"

"Fwd: Re: Fwd: Electrical Safety Committee charter-draft", "The ESC charter looks fine to me.

----- Forwarded Message

Date: Tue, 22 Jan 2002 09:01:55 -0500

From: Tom McManamy <tnm@ornl.gov>

Subject: Re: Fwd: Electrical Safety Committee charter-draft

To: Ron Battle <battlere@ornl.gov>

Ron-

Looks OK to me.

Tom

At 03:02 PM 1/18/02 -0500, you wrote:

>I am the XFD representative--Target and Instruments--on this safety
>committee. Any comments on this charter?

>

>----- Forwarded Message

>Date: Fri, 18 Jan 2002 14:02:26 -0500

>From: Paul Holik <holik@sns.gov>

>Subject: Electrical Safety Committee charter-draft

>To: "Devanwr@Ornl.Gov" <devanwr@ornl.gov>, William Stone <stonewcjr@sns.gov>,

> "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Paul Gibson <paulg@sns.gov>,

> "David E. Anderson" <deanderson@ornl.gov>, Scott Fisher <sfisher@sns.gov>,

> John Crandall <crandall@sns.gov>, Ron Cornwell <cornwellrj@ornl.gov>,

> Ronald E Battle <battlere@sns.gov>

>Cc: Dan Stout <danstout@sns.gov>, Sam McKenzie <mckenziep@sns.gov>,

> Mario Giannella <giannella@sns.gov>

>

>Hello all,

>

>here in the attachment is a draft of ESC charter for comments.

>

>Regards, Paul.

>

>

>----- End of Forwarded Message

>

>Ron Battle

>865-241-0427

>

----- End of Forwarded Message

Ron Battle

865-241-0427

", "Ron

Battle", "battlere@ornl.gov", "SMTP", "holik@ornl.gov", "holik@ornl.gov", "SMTP"

"Electrical Safety Committee meeting", "

Dear all,

Electrical safety committee meeting:
RATS room 16
Monday, January 28, 15:00

Agenda:

ESC charter
WEB links to electrical safety committee folder and Equipment approval form
Electrical Safety Officers training/classes

Expected duration 30 min.

Regards, Paul.", "Paul Holik", "holik@sns.gov", "SMTP", "Devanwr@Ornl.Gov;William Stone;Richiedd@Ornl.Gov;Sam McKenzie;Paul Gibson;Mario Giannella;Scott Fisher;George Dodson;John Crandall;Ron Cornwell;Ronald E Battle;David E. Anderson", " devanwr@ornl.gov;stonewcjr@sns.gov; richiedd@ornl.gov;mckenzie@sns.gov;paulg@sns.gov;giannella@sns.gov;sfisher@sns .gov;George Dodson <dodsong@ornl.gov>;crandall@sns.gov;cornwellrj@ornl.gov;battlere@sns.gov;deander son@ornl.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "Mar ion White;Ken Reece;Frank Kornegay", "Marion White <mwhite@sns.gov>;Ken Reece <reece@sns.gov>;Frank Kornegay <kornegayfc@ornl.gov>", "SMTP;SMTP;SMTP", , , , , , "Normal", , "Normal" "RE: Electrical Safety Committee meeting", "Thank you, see you Monday. Paul

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

From: David E. Anderson [mailto:deanderson@sns.gov]
Sent: Thursday, January 24, 2002 3:35 PM
To: Paul Holik
Cc: Sam McKenzie; Ron Cornwell; David E. Anderson; reece@ornl.gov
Subject: Re: Electrical Safety Committee meeting

Paul:

I spoke to Lloyd Gordon at LANL today regarding the Electrical Officer Training. He is still very anxious to present the material at SNS, but has been out sick and away for the holidays and hence his delay in responding. I have the full set of notes from the course, which I'll bring back with me next week. We discussed the possibility of the week of 2/11 or 2/18 as possible options. We need to bring this up again at next week's meeting and try to establish a time. The training is 3 days long and covers NEC, OSHA, DoE, and NFPA requirements. Lloyd says approx. 3/4 of the class is geared toward equipment inspection issues.

I sat through a 2 hour course he taught on microwave and RF safety, and was very impressed with his preparation and teaching style. He cites many examples from R&D environments. Also, his engineering background results in a presentation which isn't so "industrial hygiene" oriented.

He's also interested in SNS considering other elective courses he offers, so if we have a few spare minutes next week, perhaps we can discuss those.

Dave in cold LANL

Paul Holik wrote:

> Dear all,
>
> Electrical safety committee meeting:
> RATS room 16
> Monday, January 28, 15:00
>
> Agenda:
>
> ESC charter
> WEB links to electrical safety committee folder and Equipment approval form
> Electrical Safety Officers training/classes
>
> Expected duration 30 min.
>
> Regards, Paul.

","Paul Holik","holik@sns.gov","SMTP","David E.
Anderson","deanderson@sns.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"Re: Electrical Safety Committee meeting","Paul:

I spoke to Lloyd Gordon at LANL today regarding the Electrical Officer Training. He is still very anxious to present the material at SNS, but has been out sick and away for the holidays and hence his delay in responding. I have the full set of notes from the course, which I'll bring back with me next week. We discussed the possibility of the week of 2/11 or 2/18 as possible options. We need to bring this up again at next week's meeting and try to establish a time. The training is 3 days long and covers NEC, OSHA, DoE, and NFPA requirements. Lloyd says approx. 3/4 of the class is geared toward equipment inspection issues.

I sat through a 2 hour course he taught on microwave and RF safety, and was very impressed with his preparation and teaching style. He cites many examples from R&D environments. Also, his engineering background results in a presentation which isn't so "industrial hygiene" oriented.

He's also interested in SNS considering other elective courses he offers, so if we have a few spare minutes next week, perhaps we can discuss those.

Dave in cold LANL

Paul Holik wrote:

> Dear all,
>
> Electrical safety committee meeting:
> RATS room 16
> Monday, January 28, 15:00
>
> Agenda:
>
> ESC charter
> WEB links to electrical safety committee folder and Equipment approval form
> Electrical Safety Officers training/classes
>
> Expected duration 30 min.
>

> Regards, Paul.

","David E. Anderson","deanderson@sns.gov","SMTP","Paul Holik","holik@sns.gov","SMTP","Sam McKenzie;Ron Cornwell;David E. Anderson;reece@ornl.gov","mckenziess@sns.gov;cornwellrj@ornl.gov;deanderson@ornl.gov;reece@ornl.gov","SMTP;SMTP;SMTP;SMTP"
"RE: Electrical Safety Committee meeting","Paul;

Once again, I will be gone during your meeting.
Please let me know what happens.

Thank you;

Paul Gibson
Front End Engineer
Spallation Neutron Source
115 Union Valley Road
Oak Ridge, TN 37830
ph# 865.574.3594
fax# 865.574.0676

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

From: Paul Holik [mailto:holik@sns.gov]
Sent: Thursday, January 24, 2002 1:24 PM
To: Devanwr@Ornl.Gov; William Stone; Richiedd@Ornl.Gov; Sam McKenzie; Paul Gibson; Mario Giannella; Scott Fisher; John Crandall; Ron Cornwell;
Ronald E Battle; David E. Anderson
Cc: Ken Reece
Subject: Electrical Safety Committee meeting

Dear all,

Electrical safety committee meeting:
RATS room 16
Monday, January 28, 15:00

Agenda:

ESC charter
WEB links to electrical safety committee folder and Equipment approval form
Electrical Safety Officers training/classes

Expected duration 30 min.

Regards, Paul.

","Paul Gibson","paulg@sns.gov","SMTP","Paul Holik","holik@sns.gov","SMTP",,,,,,,,,,"Normal"
"Electrical Safety Committee ","Dear Norbert at al.,

In light of recent events, UL listing of electrical equipment for SNS came to question again.

The representative of DCS (rack factory in Alcoa) was asked about UL listing of racks in our Friday (2002.01.25) installation meeting. A statement was made that DCS can provide UL listing at cost of cca \$1,200 per rack with some discount for repetitive installation in racks. This statement was accompanied by a notion that Y12 plant has a policy to UL list all electrical equipment.

The position and recommendation of Electrical Safety Committee has been unchanged and it was captured in 2001-10-19 dated memorandum, which is enclosed for your convenience, and states that to comply with OSHA, SNS management has to appoint SNS Electrical Safety Committee to govern this task.

Since this appointment as Authority Having Jurisdiction (AHJ) was assumed to be granted by SNS management, steps were taken by the committee to accomplish the OSHA mandated approval process.

Firstly, a form in compliance with OSHA 29 CFR 1910S has been developed and this form resides in the Electrical Safety Committee IMAN folder for permanent recording, also WEB link on ASD WEB page has been established for Electrical Safety Committee.

Secondly, the committee (namely David Anderson) investigated training and courses to enable the Electrical Safety Committee Officers (ESO's) to perform the tasks associated with the approval form.

Lloyd Gordon (recognized instructor and lecturer on this subject) from LANL has been contacted and he offered to come to SNS to give three day seminar on the subject.

The tentative date has been set for week of 2002.02.11.

The only unresolved matter for the committee is the payment for this seminar. Since Lloyd Gordon stated that his time will be paid by LANL, the travel and accommodation for his visit will have be paid by SNS. This seems like a quite favourable arrangement.

Response to these issues is appreciated that the committee can make arrangements for the seminar.

Regards, Paul.", "Paul Holik", "holik@sns.gov", "SMTP", "Rudy Damm;Norbert Holtkamp;David Olsen;Ken Reece;Marion White", "Rudy Damm <dammr@ornl.gov>;holtkamp@sns.gov;David Olsen <olsendk@email.cind.ornl.gov>;Ken Reece <reece@sns.gov>;mwhite@aps.anl.gov", "SMTP;SMTP;SMTP;SMTP;SMTP", "Roy Cutler;George Dodson;Frank Kornegay;David E. Anderson;Ronald E Battle;Ron Cornwell;John Crandall;Scott Fisher;Mario Giannella;Paul Gibson;Peter Ladd;Sam McKenzie;Richiedd@Ornl.Gov;William Stone", "Roy Cutler <cutlerri@sns.gov>;George Dodson <dodsong@ornl.gov>;Frank Kornegay <kornegayfc@ornl.gov>;deanderson@ornl.gov;battlere@sns.gov;cornwellrj@ornl.gov;crandall@sns.gov;sfisher@sns.gov;giannella@sns.gov;paulg@sns.gov;laddp@sns.gov;mc kenziesp@sns.gov;richiedd@ornl.gov;stonewcjr@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "Normal", "Normal" "FW: ESO training next week", "

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

From: David E. Anderson [mailto:deanderson@sns.gov]
Sent: Thursday, February 07, 2002 1:37 PM
To: Ronald E Battle; holik@sns.gov; Scott Fisher; Paul Gibson; Peter Ladd; Richiedd@Ornl.Gov; William Stone; Rick Riedel; rustkr@ornl.gov; Sam McKenzie
Cc: holtkamp@sns.gov; kornegayfc@ornl.gov; lbgordon@lanl.gov; norriskp@ornl.gov
Subject: ESO training next week

Greetings:

Lloyd Gordon has agreed to come to Oak Ridge next week and train the designated Electrical Safety Officers for each group and/or division of the SNS. His three day course will discuss NEC, NFPA, OSHA, and DoE codes and regulations, and how they apply in a laboratory environment. He will also discuss the important topic of inspection of non certified equipment. Although the material was developed for the Los Alamos audience, most of it is pertinent to the work we do here.

We'll start at 8:30 a.m. in room 3104 of 701 Scarboro. I expect we'll spend all day Monday, and Tuesday, as well as at least the morning of Wednesday, getting trained (February 11-13). In addition to the materials Lloyd and his colleagues developed for the course, he will be bring the latest copies of the NEC, NFPA, and DoE documentation for all participants. I look forward to Lloyd's visit and feel this is an important step in assuring the safety of the SNS facility.

David Anderson

","Paul Holik","holik@sns.gov","SMTP","Randall Wood;Charles Garren","Randall Wood <woodrj@ornl.gov>;garrencl@sns.gov","SMTP;SMTP",,,,,,,,,,"Normal",,"Normal" "ESO training next week","Greetings:

Lloyd Gordon has agreed to come to Oak Ridge next week and train the designated Electrical Safety Officers for each group and/or division of the SNS. His three day course will discuss NEC, NFPA, OSHA, and DoE codes and regulations, and how they apply in a laboratory environment. He will also discuss the important topic of inspection of non certified equipment. Although the material was developed for the Los Alamos audience, most of it is pertinent to the work we do here.

We'll start at 8:30 a.m. in room 3104 of 701 Scarboro. I expect we'll spend all day Monday, and Tuesday, as well as at least the morning of Wednesday, getting trained (February 11-13). In addition to the materials Lloyd and his colleagues developed for the course, he will be bring the latest copies of the NEC, NFPA, and DoE documentation for all participants. I look forward to Lloyd's visit and feel this is an important step in assuring the safety of the SNS facility.

David Anderson

","David E. Anderson","deanderson@sns.gov","SMTP","Ronald E Battle;holik@sns.gov;Scott Fisher;Paul Gibson;Peter Ladd;Richiedd@Ornl.Gov;William Stone;Rick Riedel;rustkr@ornl.gov;Sam McKenzie","battlere@sns.gov;holik@sns.gov;sfisher@sns.gov;paulg@sns.gov;laddp@sns.gov;richiedd@ornl.gov;stonewcjr@sns.gov;riedelra@ornl.gov;rustkr@ornl.gov;mkenzie@sns.gov","SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP","holtkamp@sns.gov;kornegayfc@ornl.gov;lbgordon@lanl.gov;norriskp@ornl.gov","holtkamp@sns.gov;kornegayfc@ornl.gov;lbgordon@lanl.gov;norriskp@ornl.gov","SMTP;SMTP;SMTP;SMTP" "Re: Electrical Safety Committee","Hallo Paul,

I m confused. What do you want me to do ?? Can I help saving the 1200\$ per rack ??

bye N

Paul Holik wrote:

> Dear Norbert at al.,

>
> In light of recent events, UL listing of electrical equipment for SNS came
> to question again.
> The representative of DCS (rack factory in Alcoa) was asked about UL listing
> of racks in our Friday (2002.01.25) installation meeting. A statement was
> made that DCS can provide UL listing at cost of cca \$1,200 per rack with
> some discount for repetitive installation in racks. This statement was
> accompanied by a notion that Y12 plant has a policy to UL list all
> electrical equipment.
> The position and recommendation of Electrical Safety Committee has been
> unchanged and it was captured in 2001-10-19 dated memorandum, which is
> enclosed for your convenience, and states that to comply with OSHA, SNS
> management has to appoint SNS Electrical Safety Committee to govern this
> task.
> Since this appointment as Authority Having Jurisdiction (AHJ) was assumed to
> be granted by SNS management, steps were taken by the committee to
> accomplish the OSHA mandated approval process.
> Firstly, a form in compliance with OSHA 29 CFR 1910S has been developed and
> this form resides in the Electrical Safety Committee IMAN folder for
> permanent recording, also WEB link on ASD WEB page has been established for
> Electrical Safety Committee.
> Secondly, the committee (namely David Anderson) investigated training and
> courses to enable the Electrical Safety Committee Officers (ESO's) to
> perform the tasks associated with the approval form.
> Lloyd Gordon (recognized instructor and lecturer on this subject) from LANL
> has been contacted and he offered to come to SNS to give three day seminar
> on the subject.
> The tentative date has been set for week of 2002.02.11.
> The only unresolved matter for the committee is the payment for this
> seminar. Since Lloyd Gordon stated that his time will be paid by LANL, the
> travel and accommodation for his visit will have be paid by SNS. This seems
> like a quite favourable arrangement.
> Response to these issues is appreciated that the committee can make
> arrangements for the seminar.

>
> Regards, Paul.

>
> -----
> Name: SNS ESC Equipment
approval.doc
> SNS ESC Equipment approval.doc Type: WINWORD File
(application/msword)
> Encoding: base64
> Download Status: Not downloaded with message

--

Norbert Holtkamp email: holtkamp@sns.gov
Oak Ridge National Laboratory
Spallation Neutron Source Project

Accelerator Systems Division ph: (865) 241-6945
701 Scarboro Rd. fax: (865) 241-6739
Oak Ridge, TN 37830-6473 cellph: (865) 604-4795

","Norbert Holtkamp","holtkamp@sns.gov","SMTP","Paul Holik","holik@sns.gov","SMTP"
"Re: [Fwd: Electrical Safety Committee]","Charlie Garren","garrencl@ornl.gov","SMTP","Jim Lawson;holik@sns.gov","lawsonjr@ornl.gov;holik@sns.gov","SMTP;SMTP","woodrj@sns.gov","woodrj@sns.gov","SMTP"
"RE: Electrical safety","Hello Ron,
#1 was always in our plan. #2 as we discussed it day before yesterday, has been explored and in deed there are DIN rail mounted terminal blocks that are red or orange colour. So, the red terminals should be UPS termination standard site wide for SNS, of course grounding conductors shall be always green and terminated to green (green-yellow) terminals, or bare Cu bus.
There are Din rail mounted fuse blocks and circuit breakers that should be mounted adjacent to the red terminals. I would recommend all three phases to be brought to each cabinet and phase load balanced as best achievable in each cabinet (equipment rack).
In order to have good protection against accidental electrical shock, the terminals should be finger safe, or if exposed on some PLC's and other equipment, they should have covers, rubber boots or other suitable finger safe protection, or be mounted in a compartment that is not accessible if the rack is opened for maintenance and testing (contactors etc.).

Regards, Paul.

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

From: Ron Battle [mailto:battlere@ornl.gov]
Sent: Wednesday, February 13, 2002 4:23 PM
To: fraziejw@sverdrup.com
Cc: cleavesje@ornl.gov; Paul Holik; William R Devan
Subject: Electrical safety

I just completed electrical safety training and a few issues were mentioned that I want to discuss with you.

1. We need to label the UPS circuits inside the cabinet. I suggest that we make a label ""UPS."" What is the best way to put this on the fuse blocks and on the terminal strips that distribute the UPS power? The circuit numbers need to be labeled inside the cabinet also.
2. We should color code the fuse blocks and terminal strips to indicate UPS and normal power. For example, can we make the UPS hot lines red, the neutral white, and grounds green. The normal power circuits would be hot blue, neutral brown, and ground green. Can we get the fuse blocks and terminal strips in those colors?
3. The screw terminals on the PLCs, IOCs, power supplies, lights, and fans should be recessed or covered in some way. The IOCs are not UL listed, but they look safe to me. The PLCs have covers over the power terminals. The Sola power supplies are finger-proof as are the fuse blocks and terminal strips. I am assuming that finger-proof makes a cabinet accessible for maintenance without a second person to monitor.

Ron Battle
865-241-0427

","Paul Holik","holik@sns.gov","SMTP","fraziejw@sverdrup.com;Ron Battle","fraziejw@sverdrup.com;battlere@ornl.gov","SMTP;SMTP","Lee Raines;Teresa Toomey;William R Devan;cleavesje@ornl.gov","lrf@sns.gov;toomeytl@sns.gov;devanwr@ornl.gov;cleavesje@ornl.gov","SMTP;SMTP;SMTP;SMTP",,,,,,"Normal",,"Normal"
","Dear Lloyd,

I want to thank you again personally and on behalf of SNS Electrical Safety Committee for the excellent seminar oriented toward Electrical Safety Officer training conducted last week. I believe that the seminar prepared and presented by you was beneficial to all participants and the SNS ESC would like to follow up with your specific seminars dealing with RF grounding, shielding, etc. Thank you again.

Regards, Paul.

Paul S. Holik
Spallation Neutron Source (SNS)
115 Union Valley Road
Oak Ridge, TN 37830-6473
Tel.:865.241.3410

Fax: 509.351.1957 ", "Paul Holik", "holik@sns.gov", "SMTP", "Lloyd B. Gordon", "lbgordon@lanl.gov", "SMTP", "David E. Anderson;Norbert Holtkamp;Sam McKenzie;Frank Kornegay;James McAtee;Terry Fogle;Brad Gallimore;Roy Cutler", "deanderson@ornl.gov;holtkamp@sns.gov;mckenziessp@sns.gov;Frank Kornegay <kornegayfc@ornl.gov>;jlmcatee@lanl.gov;tfogle@lanl.gov;gallimoreb@lanl.gov;Roy Cutler <cutlerri@sns.gov>", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP",,,,,,"Normal",,"Normal"
"Monday, March 25, 2002 Committee Meeting", "Dear all,

firstly, apology for this short notice.
Secondly, to the subject.
Electrical safety committee meeting
Monday, March 25, 2002 15:00, RATS conference room.

Agenda:

Front end (LBNL) and DTL3 (LANL) installation - Equipment Approval and component listing review.

Regards, Paul", "Paul Holik", "holik@sns.gov", "SMTP", "William Stone;Richiedd@Ornl.Gov;Ken Reece;Sam McKenzie;Peter Ladd;Paul Gibson;Mario Giannella;Scott Fisher;John Crandall;Ron Cornwell;Ronald E Battle;David E. Anderson", "stonewcjr@sns.gov; richiedd@ornl.gov;Ken Reece <reece@sns.gov>;mckenziessp@sns.gov;laddp@sns.gov;paulg@sns.gov;giannella@sns.gov;sfisher@sns.gov;crandall@sns.gov;cornwellrj@ornl.gov;battlere@sns.gov;deanderson@ornl.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "Jackie B. Smith", "smithjbl@sns.gov", "SMTP",,,,,,"Normal",,"Normal"
"March meeting minutes", "Dear all,

Electrical Safety Committee meeting minutes 2002.03.20.

Present: Ken Reece, Paul Gibson, Mario Giannella, Bill Stone, John Crandall, Ron Cornwell and Paul Holik.

only personal safety but it also ascertains fire prevention requirements, therefore limiting potential material loss.

The cable in question, ANDREW HELIAX, delivered to SNS does not meet the required rating for use in cable trays. Equivalent cable with cable tray rating is available, therefore there is no reason to deviate from requirements SNS project has set.

Regards, Paul.

Paul S. Holik

SNS ASD Electrical Safety Committee chair", "Paul Holik", "holik@sns.gov", "SMTP", "Marion White", "mwhite@aps.anl.gov", "SMTP", "Jim Eckroth; Frank Kornegay", "jim@fireriskmgmt.com; Frank Kornegay <kornegayfc@ornl.gov>", "SMTP;SMTP",,,,,,"Normal",,"Normal" "Heliac Cable", "Paul Holik, Electrical Safety Committee Chair,

I have reviewed the safety issues involving the Heliac cable recently ordered by LANL and delivered to the SNS Project.

Project requirements for cabling are provided in SNS 109010000-SR0001, Systems Requirements Document (SRD) for Cabling (October 2000), which was signed by management and officially distributed to project personnel last year. Section 4.1 of this SRD indicates all cabling shall meet applicable requirements of the National Electric Code (NEC).

The Heliac cabling delivered to the SNS Project does not meet the flame retardant properties for coaxial cable as required by Section 830 of the National Electric Code.

I have conferred with the Frank Kornegay, SNS ES&H Manager, to determine if an equivalency or exemption to the NEC cable flammability requirements was a feasible option. Without providing additional physical features such as conduit to segregate the cabling, an equivalent level of protection can not be demonstrated. Given that there is Heliac cabling available that meets both the technical and safety requirements of the SNS project, processing an exemption to what is clearly a defined SNS Project requirement is also not recommended and would likely be disapproved by DOE.

It is therefore recommended that LANL not use the noncompliant Heliac cabling on the SNS Project and ensure that all future cable orders meet the SNS SRD for Cabling.

To further facilitate the proper design of cabling in the future, a Cabling Design Criteria Document (DCD) (SNS 109010200-DC0001-R00) was recently developed by SNS to provide additional information for use by designers to insure the SNS SRD for Cabling is met. I strongly encourage all designers of cabling on the SNS Project to use this DCD to assist them in meeting the Cabling SRD requirements.

Jim Eckroth, PE, CSP
SNS Fire Protection Engineer

", "Jim Eckroth", "jim@fireriskmgmt.com", "SMTP", "Paul Holik", "holik@sns.gov", "SMTP", "Frank Kornegay", "kornegayfc@ornl.gov", "SMTP",,,,,,"Normal" "" "Frank,

Attached is a draft memo that I would like you to review and if found to be acceptable, send as an e-mail to P. Holik, Electrical Safety Committee Chair.

Thanks,

Jim E.

","Jim
Eckroth","jim@fireriskmgt.com","SMTP","kornegayfc@ornl.gov","kornegayfc@ornl.gov
","SMTP","holik@ornl.gov","holik@ornl.gov","SMTP",,,,,,"Normal"
"Fwd:","Paul, sir:

I concur with the attached memo.

Frank Kornegay
SNS ES&H Manager

>Date: Fri, 05 Apr 2002 13:10:42 -0500
>From: Jim Eckroth <jim@fireriskmgt.com>
>Subject:
>To: kornegayfc@ornl.gov
>Cc: holik@ornl.gov
>Reply-to: jim@fireriskmgt.com
>
>Frank,
>
>Attached is a draft memo that I would like you to review and if found to be
>acceptable, send as an e-mail to P. Holik, Electrical Safety Committee
>Chair.
>
>Thanks,
>
>Jim E.
","Frank Kornegay","fck@ornl.gov","SMTP","Paul
Holik","holik@sns.gov","SMTP","jim@fireriskmgt.com","jim@fireriskmgt.com","SMTP"
"RE: Heliax","Frank,

The attached email is written by you (ghosted by me), so it was intended that you cut and paste the attached memo into a new email to Paul so that Paul could then forward that official email on to LANL and others. Just a little more formality in this day and age of "directive by email".

Thanks,

Jim E.

-----Original Message-----
From: Frank Kornegay [mailto:fck@ornl.gov]
Sent: Friday, April 05, 2002 2:06 PM
To: Paul Holik
Cc: jim@fireriskmgt.com
Subject: Fwd:

Paul, sir:

I concur with the attached memo.

Frank Kornegay
SNS ES&H Manager

>Date: Fri, 05 Apr 2002 13:10:42 -0500
>From: Jim Eckroth <jim@fireriskmgt.com>
>Subject:
>To: kornegayfc@ornl.gov
>Cc: holik@ornl.gov
>Reply-to: jim@fireriskmgt.com

>
>Frank,
>

>Attached is a draft memo that I would like you to review and if found to be
>acceptable, send as an e-mail to P. Holik, Electrical Safety Committee
>Chair.

>
>Thanks,

>
>Jim E.

","Jim Eckroth","jim@fireriskmgt.com","SMTP","Frank
Kornegay","kornegayfc@ornl.gov","SMTP","Paul
Holik","holik@sns.gov","SMTP",,,,,,"Normal"
"[Fwd: FW: Heliac Cable]","hi Don -

The noncompliant Heliac cable is unacceptable to
SNS, as you see from the notes below. We await
your guidance on returning the cable that has been
delivered to RATS. thanks, m

----- Original Message -----
Subject: FW: Heliac Cable
Date: Mon, 08 Apr 2002 11:17:10 -0400
From: Paul Holik <holik@sns.gov>
To: Marion White <mwhite@aps.anl.gov>
CC: "Jackie B. Smith" <smithjbl@sns.gov>

Hello Marion,
herewith I am forwarding the official statement written by Jim Eckroth
stating his position on the heliac cable in conjunction with NEC and SNS
requirements. This is in support of the Electrical Safety Committee
recommendation, and is consistent with the quoted document written by
John
Cleaves.
If this is not sufficient in format as an official position on the
subject
please advise.
Regards, Paul.

-----Original Message-----
From: Jim Eckroth [mailto:jim@fireriskmgt.com]
Sent: Monday, April 08, 2002 9:18 AM
To: Paul Holik
Cc: Frank Kornegay
Subject: Heliac Cable

Paul Holik, Electrical Safety Committee Chair,

I have reviewed the safety issues involving the Heliac cable recently ordered by LANL and delivered to the SNS Project.

Project requirements for cabling are provided in SNS 109010000-SR0001, Systems Requirements Document (SRD) for Cabling (October 2000), which was signed by management and officially distributed to project personnel last year. Section 4.1 of this SRD indicates all cabling shall meet applicable requirements of the National Electric Code (NEC).

The Heliac cabling delivered to the SNS Project does not meet the flame retardant properties for coaxial cable as required by Section 830 of the National Electric Code.

I have conferred with Frank Kornegay, the SNS ES&H Manager, to determine if an equivalency or exemption to the NEC cable flammability requirements was a feasible option. Without providing additional physical features such as conduit to segregate the cabling, an equivalent level of protection can not be demonstrated. Given that there is Heliac cabling available that meets both the technical and safety requirements of the SNS project, processing an exemption to what is clearly a defined SNS Project requirement is also not recommended and would likely be disapproved by DOE.

It is therefore recommended that LANL not use the noncompliant Heliac cabling on the SNS Project and ensure that all future cable orders meet the SNS SRD for Cabling.

To further facilitate the proper design of cabling in the future, a Cabling Design Criteria Document (DCD) (SNS 109010200-DC0001-R00) was recently developed by SNS to provide additional information for use by designers to insure the SNS SRD for Cabling is met. I strongly encourage all designers of cabling on the SNS Project to use this DCD to assist them in meeting the Cabling SRD requirements.

Jim Eckroth, PE, CSP
SNS Fire Protection Engineer

","Marion M. White","mwhite@aps.anl.gov","SMTP","Don
Rej","drej@lanl.gov","SMTP","Kirk Christensen;Will Fox;Dan Rees;Debra
Graves;Paul Holik;Norbert Holtkamp;Raymond

Fuja", "kchristensen@lanl.gov;wefox@lanl.gov;drees@lanl.gov;gravesda@sns.gov;holik@ornl.gov;holtkamp@sns.gov;rfuja@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP" "Electrical Safety Committee", "Dear Tony at al:

ASD has established Electrical Safety Committee that serves as an advisory to the management. Each ASD technical group has a representative on the committee, who serves as an electrical safety officer (ESO) for that group and advisory to the group leader on electrical safety aspects of installation and operation. XFD joined the committee with two members, representing target facilities and target instruments respectively.

It is herewith brought to your attention that CFD does not have an official representative. It would be beneficial to the project as well as to the ASD ESC to have a CFD representative on the committee.

The committee would welcome Randall Wood, who participated in few meetings in the past, or other by you selected representative.

Regards, Paul.

Paul S. Holik (ESC chairman)
Spallation Neutron Source (SNS)
115 Union Valley Road
Oak Ridge, TN 37830-6473
Tel.:865.241.3410

Fax: 509.351.1957 ", "Paul Holik", "holik@sns.gov", "SMTP", "Tony Chargin;Charles Garren;Jim

Lawson", "chargina@sns.gov;garrencl@sns.gov;lawsonjr@sns.gov", "SMTP;SMTP;SMTP", "N orbert Holtkamp;Frank Kornegay;Sam McKenzie;Randall

Wood", "holtkamp@sns.gov;Frank Kornegay

<kornegayfc@ornl.gov>;mckenziep@sns.gov;Randall Wood

<woodrj@ornl.gov>", "SMTP;SMTP;SMTP;SMTP", , , , , "Normal", , "Normal"

"RE: Elec. safety committee", "Rick Riedel will be the Instrument Systems representative on the Elec.

Safety committee.

Kent Crawford

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

From: Ron Battle

To: rk Crawford@anl.gov

Cc: holik@sns.gov; gabrielta@ornl.gov

Sent: 4/4/2002 11:25 AM

Subject: Elec. safety committee

Paul Holik told me that there is not currently a representative on the Electrical Safety Committee from Instruments. I am the representative from

Target, but I cannot represent Instruments also. Do you have someone assigned to the ESC? There are important issues concerning cabinet fabrication and training that need to be known by those building equipment

so I think Instruments need a person on the committee. Let Paul know who

will be your representative. Thanks.

Ron Battle
865-241-0427

working on exposed de-energized electrical circuit parts or near enough to them to expose

the personnel to any electrical hazard, operating at:

50 V or higher to ground or line-to-line AC or DC.

Voltages less than 50 V if it may create increased exposure to electrical burns or to explosion due to electrical arcs. (mostly high current DC)

Installation, servicing and maintaining equipment in which the unexpected energization

or start-up of the equipment, or release of the stored energy could cause injury to

personnel. Installation, servicing and maintaining systems involving any hazardous energy including mechanical, hydraulic, pneumatic, chemical, or thermal. (this will apply to installation of magnet and magnet power supply cooling water, pneumatic valves, etc.)

This will also apply for later operation and maintenance, as well as to RATS testing activities.

Regards, Paul.", "Paul Holik", "holik@sns.gov", "SMTP", "Sam McKenzie", "mckenziesp@sns.gov", "SMTP", "Roy Cutler", "Roy Cutler <cutlerri@sns.gov>", "SMTP", , , , , "Normal", , "Normal" "Re: Electrical Safety Committee meeting minutes", "Ron,

Thanks for the suggested changes.

For Emergency Key removal, I too would prefer having a second key, rather than using bolt cutters, simply because the train of thought would be "Oh, I need to get the other key... Oh, it's locked up... Oh, I need to follow the procedure to get the key unlocked", rather than "I'll go grab the bolt cutters and be right back."

Yes, I know that they are supposed to follow procedures before grabbing the bolt cutters, but once you allow the removal of locks by other means than using keys, the genie is out of the bag. Subsequent removers will be tempted to bypass procedure and just grab the bolt cutters.

But whatever we decide to do, as I pointed out at the meeting, we need to follow procedure. We can't have one thing written and another thing in practice. Right now, we have some locks with only one key provided by the vendor, and some locks with two keys (and I'm not sure who has the second key - I hope they aren't hanging on the lockout Tagout station anymore). And the procedure says two keys, second one kept secure.

As for the Group Lockout Procedure, I think a group lockout box is much better than a logbook. But if more than one group lockout box exists (as I think very likely) we do need to emphasize the proper labeling and verification to ensure locking out the right box. At CESR we had a case where a group lockout was performed, only 4 of the 6 keys necessary were placed in the box labeled "CESR Magnets" and then everyone else put their lock on that box, not realizing that only some, and not all, of the CESR Magnets were locked out - not good, luckily no one was harmed.

Thanks,
Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Friday, May 03, 2002 11:39 AM
To: giannella@email.cind.ornl.gov
Subject: Fwd: Re: Electrical Safety Committee meeting minutes

To: Paul Holik <holik@sns.gov>, Rick Riedel <riedelra@sns.gov>, "David E. Anderson" <deanderson@ornl.gov>, Jim Eckroth <jim@fireriskmgt.com>, John Crandall <crandall@sns.gov>, Ken Reece <"Ken Reece <reece"@sns.gov>, Mario Giannella <giannella@sns.gov>, Paul Gibson <paulg@sns.gov>, Peter Ladd <laddp@sns.gov>, "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Ronald E Battle <battlere@sns.gov>, Sam McKenzie <mckenzie@sp@sns.gov>, Scott Fisher <sfisher@sns.gov>, William Stone <stonewcjr@sns.gov>

From: Ron Cornwell <cornwellrj@ornl.gov>
Subject: Re: Electrical Safety Committee meeting minutes
Cc: fck

All,

I would like to ask everyone to review the current SNS LOTO procedure located at http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf and provide suggested changes. Let's identify all of the changes and not do it piece at a time. Until the procedure is revised, we must follow it. Also, we will not be able to change the training until the procedure is changed. All of this will not happen over night. It will take time to get it through the review and approval process.

I think the consensus of the committee the other day was not to have 2 keys for the padlock. Therefore, one suggestion I have is to rewrite Section 3. Lockout/Tagout Equipment as follows:

Remove 3.b. the portion on keys and just include a statement in 3.a Padlocks shall be identified as being used for LOTO. At SNS, a padlock with a red body indicates that it is being used for LOTO. Each lock shall have only a single key. Also, in Section 6. Emergency Removal of LOTO Devices, we will need to remove from the 5th bullet reference to the emergency key.

Just in case you want to reconsider, some places do have a second key. For example, SLAC states that departments may keep a duplicate key, which may be used to remove locks according to an emergency removal procedure. SLAC's emergency removal procedure is basically the same as the one we have in section 6 of our current procedure. The emergency removal instructions state to use the second key, which is maintained in a secure area or cut lock. The emergency removal process is the same if you have a second key or use the bolt cutters.

Section 6. Emergency Removal of LOTO Devices I noticed a mistake in this section. The 5th bullet refers to Section 3. C. It should be Section 3. B.

Section 9. Group LOTO Procedure What type of group LOTO do you want to use. The one in our current procedure relies on the use of a logbook. If you

do not like the current process, I suggest the following:

Group LOTO Procedure

When a crew performs servicing, maintenance, or modification, the manager may determine that the use of a group LOTO procedure is appropriate. This determination must be made only if the size of the crew and the nature of the work preclude the feasibility of individual LOTO, and if the level of protection provided by the group LOTO procedure is equivalent to that of individual LOTO.

A group LOTO procedure is a special procedure wherein the responsibility for applying and removing the lockout devices of a group of authorized employees is vested in a single designated authorized employee.

a. Procedure/Application of Group LOTO

(1) The manager must determine that group LOTO is appropriate.

(2) The manager must convene a meeting of all members of the group to be covered under the procedure.

· The manager must describe the tasks to be performed.

· The manager must delegate primary responsibility to a designated authorized employee for a specified group of employees working under the protection of the group's LOTO.

· Each member of the specified group must be trained and authorized, as described in section 11.

(3) The designated authorized employee is responsible for ensuring that each step of the general or equipment-specific written procedure is completed.

(4) The designated authorized employee must apply his/her personal LOTO lock(s) and tag(s) to the energy-control device(s) and indicate on the tag that a "group lockout" is in effect.

(5) Each authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

(6) The designated authorized employee must communicate to each person in the crew that LOTO is in place and work may commence.

(7) If the makeup of the crew changes while work is in progress, the designated authorized employee must inform any new group member that a group lockout is in place and communicate to him/her all the information relating to the group lockout.

Anyone leaving the group before the servicing, maintenance, or modification is completed must notify the designated authorized employee. The group member leaving must communicate the status of his/her activities to the designated authorized employee.

Delete section 6.b Release from Group LOTO

being locked out the last sentence should state - device or permanently alter its energy ... instead of after its energy.

Yes, the consensus of the group the other day was to have a uniform LOTO tag. I do not necessarily agree. The current procedure allows the various groups to obtain typical LOTO tags from various safety supply and equipment distributors. The various distributors have many types of LOTO tags. We currently have 2 or 3 different tags in the RATS. However, they all say basically the same thing. Do you really want to specify a particular tag and a particular distributor? Since we are not making our own tags, is it legal to specify a particular tag/distributor? I think we could include an example of the type of tag we prefer. Do you want to specify the specific label lockout hasps that we can use? Instead of being so prescriptive, I recommend allowing people to use their judgement, but I don't always know where that line is between judgement and prescriptiveness.

Please let me know what you think ASAP.
Thanks,
Ron

At 10:51 AM 4/24/2002 -0400, Paul Holik wrote:

Dear all,

in spite of the lengthy meeting discussion, meeting minutes are short.

Monday, April 22, 2002

Present: John Mash burn, Scott Fisher, Mario Grinnell, John Crandall,
Randall Wood, Ron Battle,
Paul Gibson, Sam McKenzie, Ron Cornwell.

Committee has agreed that the Safety Officers (ESFO) will supply to Sam McKenzie the scope of electrical hazards associated with each relevant system as base for an ASD employee orientation course.

Due by Monday, April 29, 2002.

Committee has agreed to uniform LOTO tags. Mario Giannella suggested tag format and colours that the operations group would prefer and agreed to select such.

Committee agreed to have a minor wording change in SNS LOTO, although with substantial impact on lock removal procedure. Committee has agreed that LOTO locks shall have only one key and therefore no spare keys shall be in possession of anyone else than the person using the lock. Ron Cornwell and Sam McKenzie should be correcting the SNS LOTO and the WEB based course.

Regards, Paul.

","Mario Giannella","giannella@sns.gov","SMTP","Ron Cornwell","cornwellrj@ornl.gov","SMTP","stone;fisher;battle;ladd;richied;mckenzie;holik;reece;anderson-david;gibson-paul;eckroth;crandall","stonewcjr@ornl.gov;sfisher@ornl.gov;battlere@ornl.gov;laddp@ornl.gov;richiedd@ornl.gov;mckenziesp@ornl.gov;holik@ornl.gov;reece@ornl.gov;deanderson@ornl.gov;paulg@ornl.gov;jim@fireriskmgt.com;crandall@ornl.gov","SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP","Normal"
"RE: Electrical Safety Committee meeting minutes","The outcome of the ESC meeting was clearly one key.
Paul.

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 5:19 PM
To: Paul Gibson; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

Some labs (e.g. SLAC) use two keys for LOTO and some labs (e.g. LANL) use one key and bolt cutters. I guess it depends on what you are most familiar with.

When followed correctly, either procedure is safe. But we already have an SNS policy, signed and approved and people are taking the Web training, and answering the test question saying there are two keys. As Ron points out, it will take months to get the new procedure approved, then we would have to redo the web-training for everyone who had previously taken it.

Also, for other safety systems, e.g. the PPS, there will be duplicate keys (for locked racks and Operator control panels, etc) with the second key under tight control. Should LOTO be different?

Again, either procedure is safe. But which will rock the boat less?

I'm happy to go either way, whatever the committee decides, but I did want to point out some of the obstacles.

Mario Giannella

Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Paul Gibson [mailto:paulg@sns.gov]
Sent: Friday, May 03, 2002 3:30 PM
To: Mario Giannella; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-
david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

To all;

After thinking about both scenarios (and destroying the second keys to our LOTO locks)

I am in favor of only one key per lock. While I tend to be a pessimist on human nature

I do believe that everyone respects a circuit which is locked out and the safety issues

it involves. I don't believe that anyone will cut a lock without following procedure or for

convenience. Keep in mind that this can be done maliciously with or without a second

key being available. What I do believe is that having a second key to a lock will always allow

the fear of doubt to creep into a workers mind concerning where it is and is it still locked

up. Another valid comment was the one that if a lock has to be cut off then it can't be

removed and replaced "as-is". There will be evidence of the infraction. I also believe that

there should be a VERY short list of people who are allowed to remove a lock by cutting it,

perhaps only 2 or 3 and this duty should never be allocated or phoned in.

I have no opinion at this time on the Group LOTO issue.

Thanks;

Paul Gibson
Front End Engineer
Spallation Neutron Source
115 Union Valley Road
Oak Ridge, TN 37830
ph# 865.574.3594
fax# 865.574.0676

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 2:15 PM
To: Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-
david; gibson-paul; eckroth; crandall
Subject: Re: Electrical Safety Committee meeting minutes

Ron,

Thanks for the suggested changes.

For Emergency Key removal, I too would prefer having a second key, rather than using bolt cutters, simply because the train of thought would be "Oh, I need to get the other key... Oh, it's locked up... Oh, I need to follow the procedure to get the key unlocked", rather than "I'll go grab the bolt cutters and be right back."

Yes, I know that they are supposed to follow procedures before grabbing the bolt cutters, but once you allow the removal of locks by other means than using keys, the genie is out of the bag. Subsequent removers will be tempted to bypass procedure and just grab the bolt cutters.

But whatever we decide to do, as I pointed out at the meeting, we need to follow procedure. We can't have one thing written and another thing in practice. Right now, we have some locks with only one key provided by the vendor, and some locks with two keys (and I'm not sure who has the second key - I hope they aren't hanging on the lockout Tagout station anymore). And the procedure says two keys, second one kept secure.

As for the Group Lockout Procedure, I think a group lockout box is much better than a logbook. But if more than one group lockout box exists (as I think very likely) we do need to emphasize the proper labeling and verification to ensure locking out the right box. At CESR we had a case where a group lockout was performed, only 4 of the 6 keys necessary were placed in the box labeled "CESR Magnets" and then everyone else put their lock on that box, not realizing that only some, and not all, of the CESR Magnets were locked out - not good, luckily no one was harmed.

Thanks,
Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Friday, May 03, 2002 11:39 AM
To: giannella@email.cind.ornl.gov
Subject: Fwd: Re: Electrical Safety Committee meeting minutes

To: Paul Holik <holik@sns.gov>, Rick Riedel <riedelra@sns.gov>, "David E. Anderson" <deanderson@ornl.gov>, Jim Eckroth <jim@fireriskmgt.com>, John Crandall <crandall@sns.gov>, Ken Reece <"Ken Reece <reece">@sns.gov>, Mario Giannella <giannella@sns.gov>, Paul Gibson <paulg@sns.gov>, Peter Ladd <laddp@sns.gov>, "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Ronald E Battle <battlere@sns.gov>, Sam McKenzie <mckenzie@sp@sns.gov>, Scott Fisher <sfisher@sns.gov>, William Stone <stonewcjr@sns.gov>

From: Ron Cornwell <cornwellrj@ornl.gov>
Subject: Re: Electrical Safety Committee meeting minutes
Cc: fck

All,

I would like to ask everyone to review the current SNS LOTO procedure located at http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf and provide suggested changes. Let's identify all of the changes and not do it piece at a time. Until the procedure is revised, we must follow it. Also, we will not be able to change the training until the procedure is changed. All of this will not happen over night. It will take time to get it through the review and approval process.

I think the consensus of the committee the other day was not to have 2 keys for the padlock. Therefore, one suggestion I have is to rewrite Section 3. Lockout/Tagout Equipment as follows:

Remove 3.b. the portion on keys and just include a statement in 3.a Padlocks shall be identified as being used for LOTO. At SNS, a padlock with a red body indicates that it is being used for LOTO. Each lock shall have only a single key. Also, in Section 6. Emergency Removal of LOTO Devices, we will need to remove from the 5th bullet reference to the emergency key.

Just in case you want to reconsider, some places do have a second key. For example, SLAC states that departments may keep a duplicate key, which may be used to remove locks according to an emergency removal procedure. SLAC's emergency removal procedure is basically the same as the one we have in section 6 of our current procedure. The emergency removal instructions state to use the second key, which is maintained in a secure area or cut lock. The emergency removal process is the same if you have a second key or use the bolt cutters.

Section 6. Emergency Removal of LOTO Devices I noticed a mistake in this section. The 5th bullet refers to Section 3. C. It should be Section 3. B.

Section 9. Group LOTO Procedure What type of group LOTO do you want to use. The one in our current procedure relies on the use of a logbook. If you do not like the current process, I suggest the following:

Group LOTO Procedure

When a crew performs servicing, maintenance, or modification, the manager may determine that the use of a group LOTO procedure is appropriate. This determination must be made only if the size of the crew and the nature of the work preclude the feasibility of individual LOTO, and if the level of protection provided by the group LOTO procedure is equivalent to that of individual LOTO.

A group LOTO procedure is a special procedure wherein the responsibility for applying and removing the lockout devices of a group of authorized employees is vested in a single designated authorized employee.

a. Procedure/Application of Group LOTO

(1) The manager must determine that group LOTO is appropriate.

(2) The manager must convene a meeting of all members of the group to be covered under the procedure.

. The manager must describe the tasks to be performed.

. The manager must delegate primary responsibility to a designated authorized employee for a specified group of employees working under the protection of the group's LOTO.

Each member of the specified group must be trained and authorized, as described in section 11.

(3) The designated authorized employee is responsible for ensuring that each step of the general or equipment-specific written procedure is completed.

(4) The designated authorized employee must apply his/her personal LOTO lock(s) and tag(s) to the energy-control device(s) and indicate on the tag that a "group lockout" is in effect.

(5) Each authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

(6) The designated authorized employee must communicate to each person in the crew that LOTO is in place and work may commence.

(7) If the makeup of the crew changes while work is in progress, the designated authorized employee must inform any new group member that a group lockout is in place and communicate to him/her all the information relating to the group lockout.

Anyone leaving the group before the servicing, maintenance, or modification is completed must notify the designated authorized employee. The group member leaving must communicate the status of his/her activities to the designated authorized employee.

Delete section 6.b Release from Group LOTO

Page 14 of the current procedure A typo in c. Capable of being locked out the last sentence should state - device or permanently alter its energy ... instead of after its energy.

Yes, the consensus of the group the other day was to have a uniform LOTO tag. I do not necessarily agree. The current procedure allows the various groups to obtain typical LOTO tags from various safety supply and equipment distributors. The various distributors have many types of LOTO tags. We currently have 2 or 3 different tags in the RATS. However, they all say basically the same thing. Do you really want to specify a particular tag and a particular distributor? Since we are not making our own tags, is it legal to specify a particular tag/distributor? I think we could include an example of the type of tag we prefer. Do you want to specify the specific label lockout hasps that we can use? Instead of being so prescriptive, I recommend allowing people to use their judgement, but I don't always know where that line is between judgement and prescriptiveness.

Please let me know what you think ASAP.
Thanks,
Ron

At 10:51 AM 4/24/2002 -0400, Paul Holik wrote:

Dear all,

in spite of the lengthy meeting discussion, meeting minutes are short.

Monday, April 22, 2002

Present: John Mash burn, Scott Fisher, Mario Grinnell, John Crandall,

Randall Wood, Ron Battle,
Paul Gibson, Sam McKenzie, Ron Cornwell.

Committee has agreed that the Safety Officers (ESFO) will supply to Sam McKenzie the scope of electrical hazards associated with each relevant system as base for an ASD employee orientation course. Due by Monday, April 29, 2002.

Committee has agreed to uniform LOTO tags. Mario Giannella suggested tag format and colours that the operations group would prefer and agreed to select such.

Committee agreed to have a minor wording change in SNS LOTO, although with substantial impact on lock removal procedure. Committee has agreed that LOTO locks shall have only one key and therefore no spare keys shall be in possession of anyone else than the person using the lock. Ron Cornwell and Sam McKenzie should be correcting the SNS LOTO and the WEB based course.

Regards, Paul.

","Paul Holik","holik@sns.gov","SMTP","Roy Cutler;Mario Giannella;Paul Gibson;Ron Cornwell","Roy Cutler <cutlerri@sns.gov>;giannella@sns.gov;paulg@sns.gov;cornwellrj@ornl.gov","SMTP;SMTP;SMTP;SMTP","stone;fisher;battle;ladd;richied;mckenzie;holik;reece;anderson-david;gibson-paul;eckroth;crandall;Norbert Holtkamp","stonewcjr@ornl.gov;sfisher@ornl.gov;battlere@ornl.gov;laddp@ornl.gov;richiedd@ornl.gov;mckenziesp@ornl.gov;holik@ornl.gov;reece@ornl.gov;deanderson@ornl.gov;paulg@ornl.gov;jim@fireriskmgt.com;crandall@ornl.gov;holtkamp@sns.gov","SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP","Normal",,"Normal",
"RE: Electrical Safety Committee meeting minutes","Hi Mario:

[my "2 cents"] I prefer LOTO with one key and the "Major Master key" being large bolt cutters. the AGS has tried it both ways and I believe the 2-key approach is in fact less safe. In order to use the "Major Master", (as always) attempts must be made to contact the person and then an "ad-hoc" cmte with the Electrical Safety Cmte Chair (or designate) MUST approve via telephone and it be entered into the log. The primary reason for this is so that everyone fully understands the primary (and adjacent) reason(s) for the LOTO in the first place. This, of course, applies to electrical LOTO; the same (with the Radiation Safety Cmte Chair (or designate)) applies but since the area could affected could well be larger, the RSC Chair (or designate) MUST come-in for approval, (logic review must be done). There (in my view) must be only one key for any RSC LOTO.

If one knows that (for electrical safety) there is a 2nd key, I have seen people become a "tad" cavalier.

Regards,

ken.

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

From: Paul Holik [mailto:holik@sns.gov]
Sent: Monday, May 06, 2002 8:39 AM
To: Mario Giannella; Paul Gibson; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-david; gibson-paul; eckroth; crandall; Norbert Holtkamp
Subject: RE: Electrical Safety Committee meeting minutes

The outcome of the ESC meeting was clearly one key.
Paul.

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 5:19 PM
To: Paul Gibson; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

Some labs (e.g. SLAC) use two keys for LOTO and some labs (e.g. LANL) use one key and bolt cutters. I guess it depends on what you are most familiar with.

When followed correctly, either procedure is safe. But we already have an SNS policy, signed and approved and people are taking the Web training, and answering the test question saying there are two keys. As Ron points out, it will take months to get the new procedure approved, then we would have to redo the web-training for everyone who had previously taken it.

Also, for other safety systems, e.g. the PPS, there will be duplicate keys (for locked racks and Operator control panels, etc) with the second key under tight control. Should LOTO be different?

Again, either procedure is safe. But which will rock the boat less?

I'm happy to go either way, whatever the committee decides, but I did want to point out some of the obstacles.

Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Paul Gibson [mailto:paulg@sns.gov]
Sent: Friday, May 03, 2002 3:30 PM
To: Mario Giannella; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece;
anderson-david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

To all;

After thinking about both scenarios (and destroying the second keys to our LOTO locks)

I am in favor of only one key per lock. While I tend to be a pessimist on human nature

I do believe that everyone respects a circuit which is locked out and the safety issues

it involves. I don't believe that anyone will cut a lock without following procedure or for

convenience. Keep in mind that this can be done maliciously with or without a second

key being available. What I do believe is that having a second key to a lock will always allow

the fear of doubt to creep into a workers mind concerning where it is and is it still locked

up. Another valid comment was the one that if a lock has to be cut off then it can't be

removed and replaced "as-is". There will be evidence of the infraction. I also believe that

there should be a VERY short list of people who are allowed to remove a lock by cutting it,

perhaps only 2 or 3 and this duty should never be allocated or phoned in.

I have no opinion at this time on the Group LOTO issue.

Thanks;

Paul Gibson
Front End Engineer
Spallation Neutron Source
115 Union Valley Road
Oak Ridge, TN 37830
ph# 865.574.3594
fax# 865.574.0676

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 2:15 PM
To: Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece;
anderson-david; gibson-paul; eckroth; crandall
Subject: Re: Electrical Safety Committee meeting minutes

Ron,

Thanks for the suggested changes.

For Emergency Key removal, I too would prefer having a second key, rather than using bolt cutters, simply because the train of thought would be "Oh, I need to get the other key... Oh, it's locked up... Oh, I need to follow the procedure to get the key unlocked", rather than "I'll go grab the bolt cutters and be right back."

Yes, I know that they are supposed to follow procedures before grabbing the bolt cutters, but once you allow the removal of locks by other means than using keys, the genie is out of the bag. Subsequent removers will be tempted to bypass procedure and just grab the bolt cutters.

But whatever we decide to do, as I pointed out at the meeting, we need to follow procedure. We can't have one thing written and another thing in practice. Right now, we have some locks with only one key provided by the vendor, and some locks with two keys (and I'm not sure who has the second key - I hope they aren't hanging on the lockout Tagout station anymore). And the procedure says two keys, second one kept secure.

As for the Group Lockout Procedure, I think a group lockout box is much better than a logbook. But if more than one group lockout box exists (as I think very likely) we do need to emphasize the proper labeling and verification to ensure locking out the right box. At CESR we had a case where a group lockout was performed, only 4 of the 6 keys necessary were placed in the box labeled "CESR Magnets" and then everyone else put their lock on that box, not realizing that only some, and not all, of the CESR Magnets were locked out - not good, luckily no one was harmed.

Thanks,
Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Friday, May 03, 2002 11:39 AM

To: giannella@email.cind.ornl.gov
Subject: Fwd: Re: Electrical Safety Committee meeting minutes

To: Paul Holik <holik@sns.gov>, Rick Riedel <riedelra@sns.gov>, "David E. Anderson" <deanderson@ornl.gov>, Jim Eckroth <jim@fireriskmgt.com>, John Crandall <crandall@sns.gov>, Ken Reece <"Ken Reece" <reece"@sns.gov>, Mario Giannella <giannella@sns.gov>, Paul Gibson <paulg@sns.gov>, Peter Ladd <laddp@sns.gov>, "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Ronald E Battle <battlere@sns.gov>, Sam McKenzie <mckenzie@sns.gov>, Scott Fisher <sfisher@sns.gov>, William Stone <stonewcjr@sns.gov>

From: Ron Cornwell <cornwellrj@ornl.gov>
Subject: Re: Electrical Safety Committee meeting minutes
Cc: fck

All,

I would like to ask everyone to review the current SNS LOTO procedure located at http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf and provide suggested changes. Let's identify all of the changes and not do it piece at a time. Until the procedure is revised, we must follow it. Also, we will not be able to change the training until the procedure is changed. All of this will not happen over night. It will take time to get it through the review and approval process.

I think the consensus of the committee the other day was not to have 2 keys for the padlock. Therefore, one suggestion I have is to rewrite Section 3. Lockout/Tagout Equipment as follows:

Remove 3.b. the portion on keys and just include a statement in 3.a Padlocks shall be identified as being used for LOTO. At SNS, a padlock with a red body indicates that it is being used for LOTO. Each lock shall have only a single key. Also, in Section 6. Emergency Removal of LOTO Devices, we will need to remove from the 5th bullet reference to the emergency key.

Just in case you want to reconsider, some places do have a second key. For example, SLAC states that departments may keep a duplicate key, which may be used to remove locks according to an emergency removal procedure. SLAC's emergency removal procedure is basically the same as the one we have in section 6 of our current procedure. The emergency removal instructions state to use the second key, which is maintained in a secure area or cut lock. The emergency removal process is the same if you have a second key or use the bolt cutters.

Section 6. Emergency Removal of LOTO Devices I noticed a mistake in this section. The 5th bullet refers to Section 3. C. It should be Section 3. B.

Section 9. Group LOTO Procedure What type of group LOTO do you want to use. The one in our current procedure relies on the use of a logbook. If you do not like the current process, I suggest the following:

Group LOTO Procedure

When a crew performs servicing, maintenance, or modification, the manager may determine that the use of a group LOTO procedure is appropriate. This determination must be made only if the size of the crew and the nature of the work preclude the feasibility of individual LOTO, and if the level of protection provided by the group LOTO procedure is equivalent to that of individual LOTO.

A group LOTO procedure is a special procedure wherein the responsibility for applying and removing the lockout devices of a group of authorized employees is vested in a single designated authorized employee.

a. Procedure/Application of Group LOTO

(1) The manager must determine that group LOTO is appropriate.

(2) The manager must convene a meeting of all members of the group to be covered under the procedure.

. The manager must describe the tasks to be performed.

. The manager must delegate primary responsibility to a designated authorized employee for a specified group of employees working under the protection of the group's LOTO.

. Each member of the specified group must be trained and authorized, as described in section 11.

(3) The designated authorized employee is responsible for ensuring that each step of the general or equipment-specific written procedure is completed.

(4) The designated authorized employee must apply his/her personal LOTO lock(s) and tag(s) to the energy-control device(s) and indicate on the tag that a "group lockout" is in effect.

(5) Each authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

(6) The designated authorized employee must communicate to each person in the crew that LOTO is in place and work may commence.

(7) If the makeup of the crew changes while work is in progress, the designated authorized employee must inform any new group member that a group lockout is in place and communicate to him/her all the information relating to the group lockout.

Anyone leaving the group before the servicing, maintenance, or modification is completed must notify the designated authorized employee. The group member leaving must communicate the status of his/her activities to the designated authorized employee.

Delete section 6.b Release from Group LOTO

Page 14 of the current procedure A typo in c. Capable of being locked out the last sentence should state - device or permanently alter its energy ... instead of after its energy.

Yes, the consensus of the group the other day was to have a uniform LOTO tag. I do not necessarily agree. The current procedure allows the various groups to obtain typical LOTO tags from various safety supply and equipment distributors. The various distributors have many types of LOTO tags. We currently have 2 or 3 different tags in the RATS. However, they all say basically the same thing. Do you really want to specify a particular tag and a particular distributor? Since we are not making our own tags, is it legal to specify a particular tag/distributor? I think we could include an example of the type of tag we prefer. Do you want to specify the specific label lockout hasps that we can use? Instead of being so prescriptive, I recommend allowing people to use their judgement, but I don't always know where that line is between judgement and prescriptiveness.

Please let me know what you think ASAP.
Thanks,
Ron

At 10:51 AM 4/24/2002 -0400, Paul Holik wrote:

Dear all,

in spite of the lengthy meeting discussion, meeting minutes are short.

Monday, April 22, 2002

Present: John Mash burn, Scott Fisher, Mario Grinnell, John Crandall,

Randall Wood, Ron Battle,
Paul Gibson, Sam McKenzie, Ron Cornwell.

Committee has agreed that the Safety Officers (ESFO) will supply to Sam McKenzie the scope of electrical hazards associated with each relevant

system as base for an ASD employee orientation course.
Due by Monday, April 29, 2002.

Committee has agreed to uniform LOTO tags. Mario Giannella suggested tag format and colours that the operations group would prefer and agreed to select such.

Committee agreed to have a minor wording change in SNS LOTO, although with substantial impact on lock removal procedure. Committee has agreed that LOTO locks shall have only one key and therefore no spare keys shall be in possession of anyone else than the person using the lock. Ron Cornwell and Sam McKenzie should be correcting the SNS LOTO and the WEB based course.

Regards, Paul.

","Ken Reece","oyv@sns.gov","SMTP","Paul Holik","holik@sns.gov","SMTP","Giannella, Mario","giannella@sns.gov","SMTP",,,,,,"Normal"
"RE: Electrical Safety Committee meeting minutes","The outcome of the ESC meeting was clearly one key.
Paul.

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 5:19 PM
To: Paul Gibson; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

Some labs (e.g. SLAC) use two keys for LOTO and some labs (e.g. LANL) use one key and bolt cutters. I guess it depends on what you are most familiar with.

When followed correctly, either procedure is safe. But we already have an SNS policy, signed and approved and people are taking the Web training, and answering the test question saying there are two keys. As Ron points out, it will take months to get the new procedure approved, then we would have to redo the web-training for everyone who had previously taken it.

Also, for other safety systems, e.g. the PPS, there will be duplicate keys (for locked racks and Operator control panels, etc) with the second key under tight control. Should LOTO be different?

Again, either procedure is safe. But which will rock the boat less?

I'm happy to go either way, whatever the committee decides, but I did want to point out some of the obstacles.

Mario Giannella

Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Paul Gibson [mailto:paulg@sns.gov]
Sent: Friday, May 03, 2002 3:30 PM
To: Mario Giannella; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece;
anderson-david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

To all;

After thinking about both scenarios (and destroying the second keys to our LOTO locks)

I am in favor of only one key per lock. While I tend to be a pessimist on human nature

I do believe that everyone respects a circuit which is locked out and the safety issues

it involves. I don't believe that anyone will cut a lock without following procedure or for

convenience. Keep in mind that this can be done maliciously with or without a second

key being available. What I do believe is that having a second key to a lock will always allow

the fear of doubt to creep into a workers mind concerning where it is and is it still locked

up. Another valid comment was the one that if a lock has to be cut off then it can't be

removed and replaced "as-is". There will be evidence of the infraction. I also believe that

there should be a VERY short list of people who are allowed to remove a lock by cutting it,

perhaps only 2 or 3 and this duty should never be allocated or phoned in.

I have no opinion at this time on the Group LOTO issue.

Thanks;

Paul Gibson
Front End Engineer
Spallation Neutron Source
115 Union Valley Road
Oak Ridge, TN 37830
ph# 865.574.3594
fax# 865.574.0676

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 2:15 PM
To: Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece;
anderson-david; gibson-paul; eckroth; crandall
Subject: Re: Electrical Safety Committee meeting minutes

Ron,

Thanks for the suggested changes.

For Emergency Key removal, I too would prefer having a second key, rather than using bolt cutters, simply because the train of thought would be "Oh, I need to get the other key... Oh, it's locked up... Oh, I need to follow the procedure to get the key unlocked", rather than "I'll go grab the bolt cutters and be right back."

Yes, I know that they are supposed to follow procedures before grabbing the bolt cutters, but once you allow the removal of locks by other means than using keys, the genie is out of the bag. Subsequent removers will be tempted to bypass procedure and just grab the bolt cutters.

But whatever we decide to do, as I pointed out at the meeting, we need to follow procedure. We can't have one thing written and another thing in practice. Right now, we have some locks with only one key provided by the vendor, and some locks with two keys (and I'm not sure who has the second key - I hope they aren't hanging on the lockout Tagout station anymore). And the procedure says two keys, second one kept secure.

As for the Group Lockout Procedure, I think a group lockout box is much better than a logbook. But if more than one group lockout box exists (as I think very likely) we do need to emphasize the proper labeling and verification to ensure locking out the right box. At CESR we had a case where a group lockout was performed, only 4 of the 6 keys necessary were placed in the box labeled "CESR Magnets" and then everyone else put their lock on that box, not realizing that only some, and not all, of the CESR Magnets were locked out - not good, luckily no one was harmed.

Thanks,
Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Friday, May 03, 2002 11:39 AM
To: giannella@email.cind.ornl.gov
Subject: Fwd: Re: Electrical Safety Committee meeting minutes

To: Paul Holik <holik@sns.gov>, Rick Riedel <riedelra@sns.gov>, "David E. Anderson" <deanderson@ornl.gov>, Jim Eckroth <jim@fireriskmgmt.com>, John Crandall <crandall@sns.gov>, Ken Reece <"Ken Reece <reece"@sns.gov>, Mario Giannella <giannella@sns.gov>, Paul Gibson <paulg@sns.gov>, Peter Ladd <laddp@sns.gov>, "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Ronald E Battle <battlere@sns.gov>, Sam McKenzie <mckenzie@sns.gov>, Scott Fisher <sfisher@sns.gov>, William Stone <stonewcjr@sns.gov>

From: Ron Cornwell <cornwellrj@ornl.gov>
Subject: Re: Electrical Safety Committee meeting minutes

Cc: fck

All,

I would like to ask everyone to review the current SNS LOTO procedure located at http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf and provide suggested changes. Let's identify all of the changes and not do it piece at a time. Until the procedure is revised, we must follow it. Also, we will not be able to change the training until the procedure is changed. All of this will not happen over night. It will take time to get it through the review and approval process.

I think the consensus of the committee the other day was not to have 2 keys for the padlock. Therefore, one suggestion I have is to rewrite Section 3. Lockout/Tagout Equipment as follows:

Remove 3.b. the portion on keys and just include a statement in 3.a Padlocks shall be identified as being used for LOTO. At SNS, a padlock with a red body indicates that it is being used for LOTO. Each lock shall have only a single key. Also, in Section 6. Emergency Removal of LOTO Devices, we will need to remove from the 5th bullet reference to the emergency key.

Just in case you want to reconsider, some places do have a second key. For example, SLAC states that departments may keep a duplicate key, which may be used to remove locks according to an emergency removal procedure. SLAC's emergency removal procedure is basically the same as the one we have in section 6 of our current procedure. The emergency removal instructions state to use the second key, which is maintained in a secure area or cut lock. The emergency removal process is the same if you have a second key or use the bolt cutters.

Section 6. Emergency Removal of LOTO Devices I noticed a mistake in this section. The 5th bullet refers to Section 3. C. It should be Section 3. B.

Section 9. Group LOTO Procedure What type of group LOTO do you want to use. The one in our current procedure relies on the use of a logbook. If you do not like the current process, I suggest the following:

Group LOTO Procedure

When a crew performs servicing, maintenance, or modification, the manager may determine that the use of a group LOTO procedure is appropriate. This determination must be made only if the size of the crew and the nature of the work preclude the feasibility of individual LOTO, and if the level of protection provided by the group LOTO procedure is equivalent to that of individual LOTO.

A group LOTO procedure is a special procedure wherein the responsibility for applying and removing the lockout devices of a group of authorized employees is vested in a single designated authorized employee.

a. Procedure/Application of Group LOTO

(1) The manager must determine that group LOTO is appropriate.

(2) The manager must convene a meeting of all members of the group to be covered under the procedure.

- The manager must describe the tasks to be performed.
- The manager must delegate primary responsibility to a designated authorized employee for a specified group of employees working under the protection of the group's LOTO.
- Each member of the specified group must be trained and authorized, as described in section 11.

(3) The designated authorized employee is responsible for ensuring that each step of the general or equipment-specific written procedure is completed.

(4) The designated authorized employee must apply his/her personal LOTO lock(s) and tag(s) to the energy-control device(s) and indicate on the tag that a "group lockout" is in effect.

(5) Each authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

(6) The designated authorized employee must communicate to each person in the crew that LOTO is in place and work may commence.

(7) If the makeup of the crew changes while work is in progress, the designated authorized employee must inform any new group member that a group lockout is in place and communicate to him/her all the information relating to the group lockout.

Anyone leaving the group before the servicing, maintenance, or modification is completed must notify the designated authorized employee. The group member leaving must communicate the status of his/her activities to the designated authorized employee.

Delete section 6.b Release from Group LOTO

Page 14 of the current procedure A typo in c. Capable of being locked out the last sentence should state - device or permanently alter its energy ... instead of after its energy.

Yes, the consensus of the group the other day was to have a uniform LOTO tag. I do not necessarily agree. The current procedure allows the various groups to obtain typical LOTO tags from various safety supply and equipment distributors. The various distributors have many types of LOTO tags. We currently have 2 or 3 different tags in the RATS. However, they all say basically the same thing. Do you really want to specify a particular tag and a particular distributor? Since we are not making our own tags, is it legal to specify a particular tag/distributor? I think we could include an example of the type of tag we prefer. Do you want to specify the specific label lockout hasps that we can use? Instead of being so prescriptive, I recommend allowing people to use their judgement, but I don't always know where that line is between judgement and prescriptiveness.

Please let me know what you think ASAP.
Thanks,
Ron

At 10:51 AM 4/24/2002 -0400, Paul Holik wrote:

Dear all,

in spite of the lengthy meeting discussion, meeting minutes are short.

Monday, April 22, 2002

Present: John Mash burn, Scott Fisher, Mario Grinnell, John Crandall,

Randall Wood, Ron Battle,
Paul Gibson, Sam McKenzie, Ron Cornwell.

Committee has agreed that the Safety Officers (ESFO) will supply

to Sam

relevant McKenzie the scope of electrical hazards associated with each

system as base for an ASD employee orientation course.

Due by Monday, April 29, 2002.

Committee has agreed to uniform LOTO tags. Mario Giannella suggested tag

agreed to format and colours that the operations group would prefer and

select such.

Committee agreed to have a minor wording change in SNS LOTO, although with

agreed that LOTO substantial impact on lock removal procedure. Committee has

be in locks shall have only one key and therefore no spare keys shall

possession of anyone else than the person using the lock.
Ron Cornwell and Sam McKenzie should be correcting the SNS LOTO
and the WEB
based course.

Regards, Paul.

", "Paul Holik", "holik@sns.gov", "SMTP", "Mario Giannella;Paul Gibson;Ron
Cornwell", "giannella@sns.gov;paulg@sns.gov;cornwellrj@ornl.gov", "SMTP;SMTP;SMTP"
,"stone;fisher;battle;ladd;richied;mckenzie;holik;reece;anderson-david;gibson-
paul;eckroth;crandall;Norbert
Holtkamp", "stonewcjr@ornl.gov;sfisher@ornl.gov;battlere@ornl.gov;laddp@ornl.gov;
richiedd@ornl.gov;mckenziep@ornl.gov;holik@ornl.gov;reece@ornl.gov;deanderson@o
rnl.gov;paulg@ornl.gov;jim@fireriskmgt.com;crandall@ornl.gov;holtkamp@sns.gov", "
SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", , , , , , "Normal "
"LOTO Revision", "Frank,

Attached is the revised LOTO procedure. You said that you would get it in
the "official" review process.

Changes are:

1. Originally, we said there could be two keys to each lock. The second key
would be maintained in a secure place. The committee did not like the idea
of two keys. I changed the document to reflect only one key.
2. Included in the revision the typical tags to use.
3. Group LOTO Procedure - Removed the requirement for a "logbook". Just
stated names, etc. would be documented. Also, added blurb about using group
lockout device, group lockbox, or comparable mechanism.

Thanks,

Ron

", "Ron

Cornwell", "r2i@ornl.gov", "SMTP", "kornegayfc@email.cind.ornl.gov", "kornegayfc@ema
il.cind.ornl.gov", "SMTP", "holik@email.cind.ornl.gov", "holik@email.cind.ornl.gov"
,"SMTP"

"rf EMI measurements of interest to diagnostics", "Hi Mike

I had the opportunity to make some more radiated EMI measurements in the
cable trays above the operating prototype in building 18. As we discussed,
these were made during the middle of the rf pulse when the initial
transients have decayed, so would be more representative of the EMI
environment that diagnostics will see. Here is the pertinent paragraph
from the report:

An area of interest to SNS beam diagnostics and other electronic systems
that must acquire data during the rf pulse is the level of EMI associated
with the ~ 1 msec convertor-modulator/klystron operation. Although the
interference during the pulse is not as intense as that noted in the
previous reports, it occurs during the operation of some sensitive
diagnostics. With the C-M operating at 128 kV and 1.6 MW, sets of
measurements were made during the rf pulse. The measurement baseline was
20 to 24 mv peak to peak across the 75 ohm terminating resistors without
any cable attached to the scope input, with the scope located about 3
meters from the C-M and grounded through the line cord to the local power
ground. With the unshielded 32 meter CAT-5 cable connected and terminated
on both ends, the induced voltage on a twisted pair was 0.32 volts peak to
peak with occasional spikes to 0.5 volts during the 1.1 msec rf
pulse. Using the shielded cable grounded to the C-M, the induced voltage
was 0.42 volts peak to peak with occasional spikes of 0.8 volts. With the

richiedd@ornl.gov;laddp@sns.gov;paulg@sns.gov;giannella@sns.gov;Ken Reece
<reece@sns.gov>;;crandall@sns.gov;jim@fireriskmgt.com;deanderson@ornl.gov;riedel
ra@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SM
TP",,,,,,,,,,"Normal",,"Normal"
"FW: Electrical Committee Meeting Minutes","

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

From: Paul Holik [mailto:holik@sns.gov]
Sent: Friday, June 28, 2002 4:04 PM
To: William Stone; Scott Fisher; Sam McKenzie; Ronald E Battle; Ron
Cornwell; Richiedd@Ornl.Gov; Peter Ladd; Paul Gibson; Mario Giannella;
Ken Reece; John Crandall; Jim Eckroth; David E. Anderson; Rick Riedel
Subject: Electrical Committee Meeting Minutes

Meeting 2002.06.24

Present: Dave Gurd, Mario Giannella, Bill Stone, David Anderson, Mike McCarthy,
Ron Cornwell, Coles Sibley, Allan Jones, Randy McPherson, Dave Thompson, Scott
Fisher, Sam McKenzie and Paul Holik. Marion White and Roy Cutler joined the
last part of the meeting, which dealt with HF grounding, Marion via video from
JLAB.

Agenda:

Uniform labelling of electrical equipment through out the project with standard
wording.

Electrical System Group will provide/print labels.

Davis-Bacon labour compliance with Lock and Tag, orientation, etc., after BOD.
Clarification needed. Sam McKenzie.

Clarification and wording in the SNS Lock and Tag regarding group locks during
commissioning and operation. Mario Giannella.

Electrical Group will have System Test Reports prior power is connected to
devices. Sample in the attachment.

Presentation was made showing excerpts from IEEE Emerald Book regarding
grounding methods and compliance with NEC, as well as brief overview of EMI, RF
interference, ground loops and cross-talk elimination.

Paul Holik

committee chair", "Paul Holik", "holik@sns.gov", "SMTP", "Marion White;Roy
Cutler", "mwhite@aps.anl.gov;Roy Cutler
<cutlerri@sns.gov>", "SMTP;SMTP",,,,,,,,,,"Normal",,"Normal"
"FW: REMINDER - LOTO", "A Reminder:

I have not yet received your comments on the revised LOTO procedure.
Please respond by COB Tuesday, July 9.

Thank you.

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Tuesday, July 09, 2002 9:27 AM
To: stone-bill; richied-don; reece-ken; mckenzie-sam; ladd-peter;
gibson-paul; fisher-scot; crandall-john; cornwell-ron; battle-ron;
anderson-david; holik-paul
Subject: LOTO

Ron Cornwell and I have revised the Lock Out Tag Out procedure
(attached).

Specifically:

Section 3c on Tags.
Section 6 on Emergency Lock Removal.
Section 9 on Group Lockout now specifies the use of group lockboxes.

I would like to set a one-week review period, so please review and
comment by COB Tuesday, July 16th.

Thanks,

Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source
", "Mario Giannella", "giannella@sns.gov", "SMTP", "'richied-don'; 'reece-ken'; 'mckenzie-sam'; 'ladd-peter'; 'gibson-paul'; 'crandall-john'; 'battle-ron'; 'anderson-david'; 'holik-paul'", "richiedd@ornl.gov;reece@ornl.gov;mckenzie@ornl.gov;laddp@ornl.gov;paulg@ornl.gov;crandall@ornl.gov;battlere@ornl.gov;deanderson@ornl.gov;holik@ornl.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "'cornwell-ron'", "cornwellrj@ornl.gov", "SMTP", "High", "Electrical Safety Committee", "Dear all,

ESC will meet on Monday, July 29, 2002 in RATS R15.

Agenda:

Interface with CF and requests to power equipment.

LOTO review REV1 of SNS document

Equipment readiness report/documentation

Regards, Paul", "Paul Holik", "holik@sns.gov", "SMTP", "Randall Wood;David E. Anderson;Jim Eckroth;John Crandall;Ken Reece;Mario Giannella;Paul Gibson;Peter Ladd;Richiedd@Ornl.Gov;Rick Riedel;Ron Cornwell;Ronald E Battle;Sam McKenzie;Scott Fisher;William Stone", "Randall Wood <woodrj@ornl.gov>;deanderson@ornl.gov;jim@fireriskmgmt.com;crandall@sns.gov;Ken Reece <reece@sns.gov>;giannella@sns.gov;paulg@sns.gov;laddp@sns.gov;richiedd@ornl.gov;riedelra@sns.gov;cornwellrj@ornl.gov;battlere@sns.gov;mckenzie@ornl.gov;sfisher@sns.gov;stonewcjr@sns.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", "Kevin Norris;millsgl@sns.gov", "norriskp@ornl.gov;millsgl@sns.gov", "SMTP;SMTP", "Normal", "RE: Electrical Safety Committee", "yes there is time set 15:00 (3PM)
Thanks, Paul

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

From: David E. Anderson [mailto:deanderson@sns.gov]
Sent: Tuesday, July 23, 2002 10:00 AM
To: Paul Holik
Cc: David E. Anderson; Jim Eckroth; John Crandall; Mario Giannella; Paul Gibson; Peter Ladd; Richiedd@Ornl.Gov; Rick Riedel; Ron Cornwell; Ronald E Battle; Sam McKenzie; Scott Fisher; William Stone; Kevin Norris; millsgl@sns.gov
Subject: Re: Electrical Safety Committee

Time?

Paul Holik wrote:

> Dear all,
>
> ESC will meet on Monday, July 29, 2002 in RATS R15.
>
> Agenda:
>
> Interface with CF and requests to power equipment.
>
> LOTO review REV1 of SNS document
>
> Equipment readiness report/documentation
>
> Regards, Paul

","Paul Holik","holik@sns.gov","SMTP","David E. Anderson","deanderson@sns.gov","SMTP","David E. Anderson;Jim Eckroth;John Crandall;Mario Giannella;Paul Gibson;Peter Ladd;Richiedd@Ornl.Gov;Rick Riedel;Ron Cornwell;Ronald E Battle;Sam McKenzie;Scott Fisher;William Stone;Kevin Norris;millsgl@sns.gov","deanderson@ornl.gov;jim@fireriskmgmt.com;crandall@sns.gov;giannella@sns.gov;paulg@sns.gov;laddp@sns.gov;richiedd@ornl.gov;riedelra@sns.gov;cornwellrj@ornl.gov;battlere@sns.gov;mckenzie@sns.gov;sfisher@sns.gov;stonewcjr@sns.gov;norriskp@ornl.gov;millsgl@sns.gov","SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP","Normal","Normal"
"RE: Safety Committee Documentation for the ORR","Hello George,
I informed you about the charter and I spoke with Frank K. Monday to have it pushed through the process and have it signed.
Minutes are posted under the ESC link.

Regards, Paul

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

From: George Dodson [mailto:dodsong@sns.gov]
Sent: Wednesday, July 24, 2002 4:41 PM
To: mwhite@ornl.gov; holik@ornl.gov; hainesjr@ornl.gov
Cc: kornegayfc@ornl.gov; Holtkamp@ornl.gov; giannella@ornl.gov
Subject: Safety Committee Documentation for the ORR

Safety Committee Chairs,

When we go through the ARR process we must demonstrate that we have an active, effective Safety program at the SNS. In order to do this we must have a committee charter and minutes of committee meetings for each committee. The charter must be in the DCC, and the minutes must be reasonably current and somewhere that I can get access to them. Please do not wait until the last minute on this. Thanks for your help.

Regards
George

George W. Dodson
Operations Manager
Accelerator Systems Division
Spallation Neutron Source Project
P.O Box 2008 MS 6473
Oak Ridge, TN 37830
Phone: 865-241-3345
Cell: 865-388-8068
FaX: 865-241-6587
e-mail: dodsong@sns.gov

","Paul Holik","holik@sns.gov","SMTP","George
Dodson","dodsong@sns.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"FW: Lockout/Tagout","

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

From: Gary Mills [mailto:gggy@ornl.gov]
Sent: Friday, July 26, 2002 1:59 PM
To: deanderson@ornl.gov
Cc: giannella@sns.gov
Subject: Lockout/Tagout

Ron,
After considerable time digging into OSHA LO/TO standard. I found out that OSHA also required when working (as I will be involved in) with contractor that are familiar in certain practices then it provides greater assurance that the employees (workers) will willing use the procedure. Attached is a rework of your procedure that will capture this need. The SNS JHA refers to using the Lockout Tagout procedure Permit as a guide also. Please see attachments.

Thanks,
Gary Mills

Gary Mills
Lockout/Tagout Supervisor

Spallation Neutron Source Project

115 Union Valley Road
Building 810T, Room 002
Oak Ridge, Tennessee 37830

Phone: (865) 574-0259

Cell Phone:865-250-7874

Fax: (865) 574-3877

millsgl@sns.gov

","Mario Giannella","giannella@sns.gov","SMTP","cornwell-ron;dodson-george;mckenzie-sam;holik-paul","cornwellrj@ornl.gov;dodson@ornl.gov;mckenzie@ornl.gov;holik@ornl.gov","SMTP;SMTP;SMTP;SMTP",,,,,,,,,,"Normal"

"Lockout/Tagout","Ron,

After considerable time digging into OSHA LO/TO standard. I found out that OSHA also required when working (as I will be involved in) with contractor that are familiar in certain practices then it provides greater assurance that the employees (workers) will willing use the procedure. Attached is a rework of your procedure that will capture this need. The SNS JHA refers to using the Lockout Tagout procedure Permit as a guide also.

Please see attachments.

Thanks,

Gary Mills

Gary Mills

Lockout/Tagout Supervisor
Spallation Neutron Source Project

115 Union Valley Road
Building 810T, Room 002
Oak Ridge, Tennessee 37830

Phone: (865) 574-0259

Cell Phone:865-250-7874

Fax: (865) 574-3877

millsgl@sns.gov

","Gary

Mills","ggy@ornl.gov","SMTP","deanderson@ornl.gov","deanderson@ornl.gov","SMTP","giannella@sns.gov","giannella@sns.gov","SMTP"

"Notes from Electrical Safety Committe/Conventional Facilities Meeting on Equipment Turnover on 8/13/2002","All,

notes from the subject meeting follow, as well as notes from a smaller follow-up on Friday 8/16. Please let me know if you have any comments or changes.

Dan

Notes from Electrical Safety Committe/Conventional Facilities Meeting on Equipment Turnover on 8/13/2002

The SNS Electrical Safety Committee met with Conventional Facilities and Construction Manager representatives to discuss the turnover of electrical systems on Tuesday, August 13, 2002. Attendees included: Fred Carden, Jim Lawson, Tom McLaughlin, Mike Asbury, Wayne Brown (CF/CM) and Paul Holik, Teresa Toomey Scott Fisher, David Anderson, Paul Gibson, Tom Mann, Roy Cutler, Dan Stout (ASD). The purpose of the meeting was to discuss the general turnover process, specific items that would be transferred, and the schedule for providing power.

as stated in the SNS Lockout-Tagout policy above, we need to lock up the second key for each lock (and number the locks and keys).

Thanks,

Mario Giannella
Deputy Operations Manager
(865) 574-4034
Fax: (865) 241-6739

Spallation Neutron Source
701 Scarboro Road, Room 3124
Oak Ridge, TN 37830

","Mario
Giannella","giannella@sns.gov","SMTP","holik;mckenzie","holik@ornl.gov;mckenzie
p@ornl.gov","SMTP;SMTP",,,,,,,,,,"Normal"
","Paul,

Here is the tag we used at CESR. It is red and white striped for easy identification and has all the key phrases, and ample room to write remarks.

I have ordered some samples from EMED (www.emedco.com), (product number DT224) and they should arrive shortly.

Mario Giannella
Deputy Operations Manager
(865) 574-4034
Fax: (865) 241-6739

Spallation Neutron Source
701 Scarboro Road, Room 3124
Oak Ridge, TN 37830

","Mario
Giannella","giannella@sns.gov","SMTP","holik","holik@ornl.gov","SMTP","mckenzie",
,"mckenziep@ornl.gov","SMTP",,,,,,"Normal"
"Cryogenic Safety Policy","Sorry, I forgot the attachment!!!

All,

As promised at the Cryogenic Safety Committee meeting I am sending out the latest version of the Safety Policy. PLEASE read over this document carefully and send comments back to myself with a copy to the author John Jankovic (jj3n@ornl.gov). Thanks and please respond by May 17th.

Sam

","Sam

McKenzie","mckenziep@sns.gov","SMTP","barnhart@sns.gov;casagrandef@sns.gov;smit
hel@sns.gov;collinstl@sns.gov;richiedd@sns.gov;schubertjp@sns.gov;hstrong@sns.go
v;jankovicjt@ornl.gov;crabtreeja@ornl.gov;mwhite@sns.gov","barnhart@sns.gov;casa
grandef@sns.gov;smithel@sns.gov;collinstl@sns.gov;richiedd@sns.gov;schubertjp@sn
s.gov;hstrong@sns.gov;jankovicjt@ornl.gov;crabtreeja@ornl.gov;mwhite@sns.gov","S
MTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP","gabrielta@ornl.gov;harrington
rm@sns.gov;holik@sns.gov;holtkamp@sns.gov;cornwellrj@ornl.gov;dammr@sns.gov;mcke
nziesp@ornl.gov;kornegayfc@sns.gov;wrightpa@sns.gov;garrencl@ornl.gov;reece@sns.
gov;smithdw2@sns.gov;oyer@jlab.org;robertsrl@sns.gov;giannella@sns.gov;cornwellr
j@email.cind.ornl.gov","gabrielta@ornl.gov;harringtonrm@sns.gov;holik@sns.gov;ho
ltkamp@sns.gov;cornwellrj@ornl.gov;dammr@sns.gov;mckenziep@ornl.gov;kornegayfc@
sns.gov;wrightpa@sns.gov;garrencl@ornl.gov;reece@sns.gov;smithdw2@sns.gov;oyer@j
lab.org;robertsrl@sns.gov;giannella@sns.gov;cornwellrj@email.cind.ornl.gov","SMT
P;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP"
"RE: Electrical Safety Committee meeting minutes","To all;

After thinking about both scenarios (and destroying the second keys to our

LOTO locks)

I am in favor of only one key per lock. While I tend to be a pessimist on human nature

I do believe that everyone respects a circuit which is locked out and the safety issues

it involves. I don't believe that anyone will cut a lock without following procedure or for

convenience. Keep in mind that this can be done maliciously with or without a second

key being available. What I do believe is that having a second key to a lock will always allow

the fear of doubt to creep into a workers mind concerning where it is and is it still locked

up. Another valid comment was the one that if a lock has to be cut off then it can't be

removed and replaced "as-is". There will be evidence of the infraction. I also believe that

there should be a VERY short list of people who are allowed to remove a lock by cutting it,

perhaps only 2 or 3 and this duty should never be allocated or phoned in.

I have no opinion at this time on the Group LOTO issue.

Thanks;

Paul Gibson

Front End Engineer

Spallation Neutron Source

115 Union Valley Road

Oak Ridge, TN 37830

ph# 865.574.3594

fax# 865.574.0676

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

From: Mario Giannella [mailto:giannella@sns.gov]

Sent: Friday, May 03, 2002 2:15 PM

To: Ron Cornwell

Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece; anderson-david; gibson-paul; eckroth; crandall

Subject: Re: Electrical Safety Committee meeting minutes

Ron,

Thanks for the suggested changes.

For Emergency Key removal, I too would prefer having a second key, rather than using bolt cutters, simply because the train of thought would be "Oh, I need to get the other key... Oh, it's locked up... Oh, I need to follow the procedure to get the key unlocked", rather than "I'll go grab the bolt cutters and be right back."

Yes, I know that they are supposed to follow procedures before grabbing the bolt cutters, but once you allow the removal of locks by other means than using keys, the genie is out of the bag. Subsequent removers will be tempted to bypass procedure and just grab the bolt cutters.

But whatever we decide to do, as I pointed out at the meeting, we need to follow procedure. We can't have one thing written and another thing in

practice. Right now, we have some locks with only one key provided by the vendor, and some locks with two keys (and I'm not sure who has the second key - I hope they aren't hanging on the lockout Tagout station anymore). And the procedure says two keys, second one kept secure.

As for the Group Lockout Procedure, I think a group lockout box is much better than a logbook. But if more than one group lockout box exists (as I think very likely) we do need to emphasize the proper labeling and verification to ensure locking out the right box. At CESR we had a case where a group lockout was performed, only 4 of the 6 keys necessary were placed in the box labeled "CESR Magnets" and then everyone else put their lock on that box, not realizing that only some, and not all, of the CESR Magnets were locked out - not good, luckily no one was harmed.

Thanks,
Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Friday, May 03, 2002 11:39 AM
To: giannella@email.cind.ornl.gov
Subject: Fwd: Re: Electrical Safety Committee meeting minutes

To: Paul Holik <holik@sns.gov>, Rick Riedel <riedelra@sns.gov>, "David E. Anderson" <deanderson@ornl.gov>, Jim Eckroth <jim@fireriskmgt.com>, John Crandall <crandall@sns.gov>, Ken Reece <"Ken Reece <reece"@sns.gov>, Mario Giannella <giannella@sns.gov>, Paul Gibson <paulg@sns.gov>, Peter Ladd <laddp@sns.gov>, "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Ronald E Battle <battlere@sns.gov>, Sam McKenzie <mckenzie@sns.gov>, Scott Fisher <sfisher@sns.gov>, William Stone <stonewcjr@sns.gov>

From: Ron Cornwell <cornwellrj@ornl.gov>
Subject: Re: Electrical Safety Committee meeting minutes
Cc: fck

All,

I would like to ask everyone to review the current SNS LOTO procedure located at http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf and provide suggested changes. Let's identify all of the changes and not do it piece at a time. Until the procedure is revised, we must follow it. Also, we will not be able to change the training until the procedure is changed. All of this will not happen over night. It will take time to get it through the review and approval process.

I think the consensus of the committee the other day was not to have 2 keys for the padlock. Therefore, one suggestion I have is to rewrite Section 3. Lockout/Tagout Equipment as follows:

Remove 3.b. the portion on keys and just include a statement in 3.a Padlocks shall be identified as being used for LOTO. At SNS, a padlock with a red body indicates that it is being used for LOTO. Each lock shall have

only a single key. Also, in Section 6. Emergency Removal of LOTO Devices, we will need to remove from the 5th bullet reference to the emergency key.

Just in case you want to reconsider, some places do have a second key. For example, SLAC states that departments may keep a duplicate key, which may be used to remove locks according to an emergency removal procedure. SLAC's emergency removal procedure is basically the same as the one we have in section 6 of our current procedure. The emergency removal instructions state to use the second key, which is maintained in a secure area or cut lock. The emergency removal process is the same if you have a second key or use the bolt cutters.

Section 6. Emergency Removal of LOTO Devices I noticed a mistake in this section. The 5th bullet refers to Section 3. C. It should be Section 3. B.

Section 9. Group LOTO Procedure What type of group LOTO do you want to use. The one in our current procedure relies on the use of a logbook. If you do not like the current process, I suggest the following:

Group LOTO Procedure

When a crew performs servicing, maintenance, or modification, the manager may determine that the use of a group LOTO procedure is appropriate. This determination must be made only if the size of the crew and the nature of the work preclude the feasibility of individual LOTO, and if the level of protection provided by the group LOTO procedure is equivalent to that of individual LOTO.

A group LOTO procedure is a special procedure wherein the responsibility for applying and removing the lockout devices of a group of authorized employees is vested in a single designated authorized employee.

a. Procedure/Application of Group LOTO

(1) The manager must determine that group LOTO is appropriate.

(2) The manager must convene a meeting of all members of the group to be covered under the procedure.

. The manager must describe the tasks to be performed.

. The manager must delegate primary responsibility to a designated authorized employee for a specified group of employees working under the protection of the group's LOTO.

. Each member of the specified group must be trained and authorized, as described in section 11.

(3) The designated authorized employee is responsible for ensuring that each step of the general or equipment-specific written procedure is completed.

(4) The designated authorized employee must apply his/her personal LOTO lock(s) and tag(s) to the energy-control device(s) and indicate on the tag that a "group lockout" is in effect.

(5) Each authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he

or she stops working on the machine or equipment being serviced or maintained.

(6) The designated authorized employee must communicate to each person in the crew that LOTO is in place and work may commence.

(7) If the makeup of the crew changes while work is in progress, the designated authorized employee must inform any new group member that a group lockout is in place and communicate to him/her all the information relating to the group lockout.

Anyone leaving the group before the servicing, maintenance, or modification is completed must notify the designated authorized employee. The group member leaving must communicate the status of his/her activities to the designated authorized employee.

Delete section 6.b Release from Group LOTO

Page 14 of the current procedure A typo in c. Capable of being locked out the last sentence should state - device or permanently alter its energy ... instead of after its energy.

Yes, the consensus of the group the other day was to have a uniform LOTO tag. I do not necessarily agree. The current procedure allows the various groups to obtain typical LOTO tags from various safety supply and equipment distributors. The various distributors have many types of LOTO tags. We currently have 2 or 3 different tags in the RATS. However, they all say basically the same thing. Do you really want to specify a particular tag and a particular distributor? Since we are not making our own tags, is it legal to specify a particular tag/distributor? I think we could include an example of the type of tag we prefer. Do you want to specify the specific label lockout hasps that we can use? Instead of being so prescriptive, I recommend allowing people to use their judgement, but I don't always know where that line is between judgement and prescriptiveness.

Please let me know what you think ASAP.
Thanks,
Ron

At 10:51 AM 4/24/2002 -0400, Paul Holik wrote:

Dear all,

in spite of the lengthy meeting discussion, meeting minutes are short.

Monday, April 22, 2002

Present: John Mash burn, Scott Fisher, Mario Grinnell, John Crandall,
Randall Wood, Ron Battle,
Paul Gibson, Sam McKenzie, Ron Cornwell.

Committee has agreed that the Safety Officers (ESFO) will supply to Sam McKenzie the scope of electrical hazards associated with each relevant system as base for an ASD employee orientation course. Due by Monday, April 29, 2002.

Committee has agreed to uniform LOTO tags. Mario Giannella suggested tag format and colours that the operations group would prefer and agreed to select such.

Committee agreed to have a minor wording change in SNS LOTO, although with substantial impact on lock removal procedure. Committee has agreed that LOTO locks shall have only one key and therefore no spare keys shall be in possession of anyone else than the person using the lock. Ron Cornwell and Sam McKenzie should be correcting the SNS LOTO and the WEB based course.

Regards, Paul.

","Paul Gibson","paulg@sns.gov","SMTP","Mario Giannella;Ron Cornwell","giannella@sns.gov;cornwellrj@ornl.gov","SMTP;SMTP","stone;fisher;battle;ladd;richied;mckenzie;holik;reece;anderson-david;gibson-paul;eckroth;crandall","stonewcjr@ornl.gov;sfisher@ornl.gov;battlere@ornl.gov;ladd@ornl.gov;richiedd@ornl.gov;mckenziesp@ornl.gov;holik@ornl.gov;reece@ornl.gov;deanderson@ornl.gov;paulg@ornl.gov;jim@fireriskmgt.com;crandall@ornl.gov","SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP",",,,,,,","Normal" "ODH Monitors used at Cornell","As mentioned in the Cryogenics Safety Committee, I checked to see which ODH monitors were being used at Cornell, and their operational experience. Message follows:

Mario,

one key and bolt cutters. I guess it depends on what you are most familiar with.

When followed correctly, either procedure is safe. But we already have an SNS policy, signed and approved and people are taking the Web training, and answering the test question saying there are two keys. As Ron points out, it will take months to get the new procedure approved, then we would have to redo the web-training for everyone who had previously taken it.

Also, for other safety systems, e.g. the PPS, there will be duplicate keys (for locked racks and Operator control panels, etc) with the second key under tight control. Should LOTO be different?

Again, either procedure is safe. But which will rock the boat less?

I'm happy to go either way, whatever the committee decides, but I did want to point out some of the obstacles.

Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Paul Gibson [mailto:paulg@sns.gov]
Sent: Friday, May 03, 2002 3:30 PM
To: Mario Giannella; Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece;
anderson-david; gibson-paul; eckroth; crandall
Subject: RE: Electrical Safety Committee meeting minutes

To all;

After thinking about both scenarios (and destroying the second keys to our LOTO locks)

I am in favor of only one key per lock. While I tend to be a pessimist on human nature

I do believe that everyone respects a circuit which is locked out and the safety issues

it involves. I don't believe that anyone will cut a lock without following procedure or for

convenience. Keep in mind that this can be done maliciously with or without a second

key being available. What I do believe is that having a second key to a lock will always allow

the fear of doubt to creep into a workers mind concerning where it is and is it still locked

up. Another valid comment was the one that if a lock has to be cut off then it can't be

removed and replaced "as-is". There will be evidence of the infraction. I also believe that

there should be a VERY short list of people who are allowed to remove a lock by cutting it,

perhaps only 2 or 3 and this duty should never be allocated or phoned in.

I have no opinion at this time on the Group LOTO issue.

Thanks;
Paul Gibson
Front End Engineer
Spallation Neutron Source
115 Union Valley Road
Oak Ridge, TN 37830
ph# 865.574.3594
fax# 865.574.0676

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

From: Mario Giannella [mailto:giannella@sns.gov]
Sent: Friday, May 03, 2002 2:15 PM
To: Ron Cornwell
Cc: stone; fisher; battle; ladd; richied; mckenzie; holik; reece;
anderson-david; gibson-paul; eckroth; crandall
Subject: Re: Electrical Safety Committee meeting minutes

Ron,

Thanks for the suggested changes.

For Emergency Key removal, I too would prefer having a second key, rather than using bolt cutters, simply because the train of thought would be "Oh, I need to get the other key... Oh, it's locked up... Oh, I need to follow the procedure to get the key unlocked", rather than "I'll go grab the bolt cutters and be right back."

Yes, I know that they are supposed to follow procedures before grabbing the bolt cutters, but once you allow the removal of locks by other means than using keys, the genie is out of the bag. Subsequent removers will be tempted to bypass procedure and just grab the bolt cutters.

But whatever we decide to do, as I pointed out at the meeting, we need to follow procedure. We can't have one thing written and another thing in practice. Right now, we have some locks with only one key provided by the vendor, and some locks with two keys (and I'm not sure who has the second key - I hope they aren't hanging on the lockout Tagout station anymore). And the procedure says two keys, second one kept secure.

As for the Group Lockout Procedure, I think a group lockout box is much better than a logbook. But if more than one group lockout box exists (as I think very likely) we do need to emphasize the proper labeling and verification to ensure locking out the right box. At CESR we had a case where a group lockout was performed, only 4 of the 6 keys necessary were placed in the box labeled "CESR Magnets" and then everyone else put their lock on that box, not realizing that only some, and not all, of the CESR Magnets were locked out - not good, luckily no one was harmed.

Thanks,
Mario Giannella
Deputy Operations Manager
Accelerator Systems Division
Spallation Neutron Source

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

From: Ron Cornwell [mailto:cornwellrj@ornl.gov]
Sent: Friday, May 03, 2002 11:39 AM
To: giannella@email.cind.ornl.gov
Subject: Fwd: Re: Electrical Safety Committee meeting minutes

To: Paul Holik <holik@sns.gov>, Rick Riedel <riedelra@sns.gov>, "David E. Anderson" <deanderson@ornl.gov>, Jim Eckroth <jim@fireriskmgmt.com>, John Crandall <crandall@sns.gov>, Ken Reece <"Ken Reece <reece"@sns.gov>, Mario Giannella <giannella@sns.gov>, Paul Gibson <paulg@sns.gov>, Peter Ladd <laddp@sns.gov>, "Richiedd@Ornl.Gov" <richiedd@ornl.gov>, Ronald E Battle <battlere@sns.gov>, Sam McKenzie <mckenzie@sns.gov>, Scott Fisher <sfisher@sns.gov>, William Stone <stonewcjr@sns.gov>

From: Ron Cornwell <cornwellrj@ornl.gov>
Subject: Re: Electrical Safety Committee meeting minutes
Cc: fck

All,

I would like to ask everyone to review the current SNS LOTO procedure located at http://www-internal.sns.gov/esh/standards/lockout_tagout.pdf and provide suggested changes. Let's identify all of the changes and not do it piece at a time. Until the procedure is revised, we must follow it. Also, we will not be able to change the training until the procedure is changed. All of this will not happen over night. It will take time to get it through the review and approval process.

I think the consensus of the committee the other day was not to have 2 keys for the padlock. Therefore, one suggestion I have is to rewrite Section 3. Lockout/Tagout Equipment as follows:

Remove 3.b. the portion on keys and just include a statement in 3.a Padlocks shall be identified as being used for LOTO. At SNS, a padlock with a red body indicates that it is being used for LOTO. Each lock shall have only a single key. Also, in Section 6. Emergency Removal of LOTO Devices, we will need to remove from the 5th bullet reference to the emergency key.

Just in case you want to reconsider, some places do have a second key. For example, SLAC states that departments may keep a duplicate key, which may be used to remove locks according to an emergency removal procedure. SLAC's emergency removal procedure is basically the same as the one we have in section 6 of our current procedure. The emergency removal instructions state to use the second key, which is maintained in a secure area or cut lock. The emergency removal process is the same if you have a second key or use the bolt cutters.

Section 6. Emergency Removal of LOTO Devices I noticed a mistake in this section. The 5th bullet refers to Section 3. C. It should be Section 3. B.

Section 9. Group LOTO Procedure What type of group LOTO do you want to use. The one in our current procedure relies on the use of a logbook. If

you do not like the current process, I suggest the following:

Group LOTO Procedure

When a crew performs servicing, maintenance, or modification, the manager may determine that the use of a group LOTO procedure is appropriate. This determination must be made only if the size of the crew and the nature of the work preclude the feasibility of individual LOTO, and if the level of protection provided by the group LOTO procedure is equivalent to that of individual LOTO.

A group LOTO procedure is a special procedure wherein the responsibility for applying and removing the lockout devices of a group of authorized employees is vested in a single designated authorized employee.

a. Procedure/Application of Group LOTO

(1) The manager must determine that group LOTO is appropriate.

(2) The manager must convene a meeting of all members of the group to be covered under the procedure.

to be performed.

- The manager must describe the tasks

- The manager must delegate primary responsibility to a designated authorized employee for a specified group of employees working under the protection of the group's LOTO.

- Each member of the specified group must be trained and authorized, as described in section 11.

(3) The designated authorized employee is responsible for ensuring that each step of the general or equipment-specific written procedure is completed.

(4) The designated authorized employee must apply his/her personal LOTO lock(s) and tag(s) to the energy-control device(s) and indicate on the tag that a "group lockout" is in effect.

(5) Each authorized employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

(6) The designated authorized employee must communicate to each person in the crew that LOTO is in place and work may commence.

(7) If the makeup of the crew changes while work is in progress, the designated authorized employee must inform any new group member that a group lockout is in place and communicate to him/her all the information relating to the group lockout.

Anyone leaving the group before the servicing, maintenance, or modification is completed must notify the designated authorized employee. The group member leaving must communicate the status of his/her activities to the designated authorized employee.

Delete section 6.b Release from Group LOTO

being locked out the last sentence should state - device or permanently alter its energy ... instead of after its energy.

Yes, the consensus of the group the other day was to have a uniform LOTO tag. I do not necessarily agree. The current procedure allows the various groups to obtain typical LOTO tags from various safety supply and equipment distributors. The various distributors have many types of LOTO tags. We currently have 2 or 3 different tags in the RATS. However, they all say basically the same thing. Do you really want to specify a particular tag and a particular distributor? Since we are not making our own tags, is it legal to specify a particular tag/distributor? I think we could include an example of the type of tag we prefer. Do you want to specify the specific label lockout hasps that we can use? Instead of being so prescriptive, I recommend allowing people to use their judgement, but I don't always know where that line is between judgement and prescriptiveness.

Please let me know what you think ASAP.
Thanks,
Ron

At 10:51 AM 4/24/2002 -0400, Paul Holik wrote:

Dear all,

in spite of the lengthy meeting discussion, meeting minutes are short.

Monday, April 22, 2002
Present: John Mash burn, Scott Fisher, Mario Grinnell, John Crandall,
Randall Wood, Ron Battle,
Paul Gibson, Sam McKenzie, Ron Cornwell.

Committee has agreed that the Safety Officers (ESFO) will supply to
Sam

McKenzie the scope of electrical hazards associated with each relevant system as base for an ASD employee orientation course. Due by Monday, April 29, 2002.

Committee has agreed to uniform LOTO tags. Mario Giannella suggested tag format and colours that the operations group would prefer and agreed to select such.

Committee agreed to have a minor wording change in SNS LOTO, although with substantial impact on lock removal procedure. Committee has agreed that LOTO locks shall have only one key and therefore no spare keys shall be in possession of anyone else than the person using the lock. Ron Cornwell and Sam McKenzie should be correcting the SNS LOTO and the WEB based course.

Regards, Paul.
", "Mario Giannella", "giannella@sns.gov", "SMTP", "Paul Gibson;Ron Cornwell", "paulg@sns.gov;cornwellrj@ornl.gov", "SMTP;SMTP", "stone;fisher;battle;ladd;richied;mckenzie;holik;reece;anderson-david;gibson-paul;eckroth;crandall", "stonewcjr@ornl.gov;sfisher@ornl.gov;battlere@ornl.gov;laddp@ornl.gov;richiedd@ornl.gov;mckenziep@ornl.gov;holik@ornl.gov;reece@ornl.gov;deanderson@ornl.gov;paulg@ornl.gov;jim@fireriskmgt.com;crandall@ornl.gov", "SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP;SMTP", , , , , , "Normal"
"RE: safety training", "Hello Dave,

this sound like a good work. If it can be organized in September 2002, it will be excellent.

Regards, Paul

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

From: dat [mailto:deanderson@ornl.gov]
Sent: Tuesday, August 20, 2002 8:06 PM
To: mckenziep@sns.gov
Cc: championms@sns.gov; holik@sns.gov; rfuja@sns.gov
Subject: safety training

Sam:

I'm meeting with Lloyd Gordon about the LANL safety training electrical "speciality courses" which he offers here. One of the topics I expect to come up is the establishment of a date for him to come to ORNL and teach these 2 hour courses (4 total). The courses I'm specifically interested are:

Electrical Injury Mechanisms
Pulsed Power Safety
RF and Microwave Safety
Grounding and Shielding

I plan on asking Lloyd for the powerpoint files on these courses and adopting them for our future needs. Therefore, it is not imperative that all parties needing this safety training attend Lloyd's sessions; we (probably I) will offer them in the future. However, I do have a strong desire to ask Lloyd to come out to ORNL prior to us turning on any high power equipment and, at a minimum, offering the training to the RF group, some of the area managers, some of the front end people, and other interested parties. Questions for you I would appreciate an answer on prior to my meeting with Lloyd are:

Do we have an account to pay for his travel, like we did before?
Do we have any preferential dates prior to say 10Oct02?
Can you estimate the audience for this "first offering" of the training?
Any other LANL training you're interested in discussing during his visit?

Thanks.

Dave

David E. Anderson
SNS/ORNL
701 Scarboro Rd.
M/S 6478
Oak Ridge, TN 37830
(505) 665-9594 at LANL
(865) 241-7518 at ORNL

","Paul
Holik", "holik@sns.gov", "SMTP", "dat;mckenzie@sns.gov", "deanderson@ornl.gov;mckenzie@sns.gov", "SMTP;SMTP", "championms@sns.gov;rfuja@sns.gov", "championms@sns.gov;rfuja@sns.gov", "SMTP;SMTP", , , , , , "Normal", , "Normal"
"RE: Committee membership", "Hello Frank,

David Anderson - RF,
Mario Giannella - Operations
Ron Battle - Target,
Rick Riedel - Target
Peter Ladd - Vacuum,
Bill Stone - Controls,
Scott Fisher - Electrical / Power Supplies,
Paul Gibson - Ion Source,
Don Richied - Cryogenics
Randall Wood - Conventional Facilities
Gary Miles - Conventional Facilities (site LOTO manager for conventional facilities)
Ron Cornwell - ORNL/SNS
Paul Holik - Electrical/Power Supplies (chairman),
Sam McKenzie and Jim Eckroth are observers, not regular members
Kevin Norris AHJ - observer ORNL

Regards, Paul.

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

From: Frank Kornegay [mailto:fck@ornl.gov]
Sent: Thursday, August 22, 2002 1:21 PM
To: mwhite@email.cind.ornl.gov; hainesjr@ornl.gov; holik@ornl.gov
Subject: Committee membership

Lady and gentlemen:

Could you please provide me with the membership of your respective safety committee?

Thanks!!!

frank

","Paul Holik","holik@sns.gov","SMTP","Frank Kornegay","fck@ornl.gov","SMTP",,,,,,,,,,"Normal",,"Normal"
"FW: Committee membership","Hello Frank,
correction:
Gary Mills - Lockout/Tagout supervisor - Conventional Facilities
Regards, Paul

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

From: Paul Holik [mailto:holik@sns.gov]
Sent: Thursday, August 22, 2002 2:44 PM
To: Frank Kornegay
Subject: RE: Committee membership

Hello Frank,

David Anderson - RF,
Mario Giannella - Operations
Ron Battle - Target,
Rick Riedel - Target
Peter Ladd - Vacuum,
Bill Stone -Controls,
Scott Fisher - Electrical / Power Supplies,
Paul Gibson - Ion Source,
Don Richied - Cryogenics
Randall Wood - Conventional Facilities
Gary Miles - Conventional Facilities (site LOTO manager for conventional facilities)
Ron Cornwell - ORNL/SNS
Paul Holik - Electrical/Power Supplies (chairman),
Sam McKenzie and Jim Eckroth are observers, not regular members
Kevin Norris AHJ - observer ORNL

Regards, Paul.

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

From: Frank Kornegay [mailto:fck@ornl.gov]
Sent: Thursday, August 22, 2002 1:21 PM
To: mwhite@email.cind.ornl.gov; hainesjr@ornl.gov; holik@ornl.gov
Subject: Committee membership

Lady and gentlemen:

Could you please provide me with the membership of your respective safety committee?

Thanks!!!

frank

","Paul Holik","holik@sns.gov","SMTP","Frank Kornegay","Frank Kornegay
<kornegayfc@ornl.gov>","SMTP",,,,,,,,,,"Normal",,"Normal"
"Committee membership","Lady and gentlemen:

Could you please provide me with the membership of your respective safety
committee?

Thanks!!!

frank

","Frank
Kornegay","fck@ornl.gov","SMTP","mwhite@email.cind.ornl.gov;hainesjr@ornl.gov;ho
lik@ornl.gov","mwhite@email.cind.ornl.gov;hainesjr@ornl.gov;holik@ornl.gov","SMT
P;SMTP;SMTP"