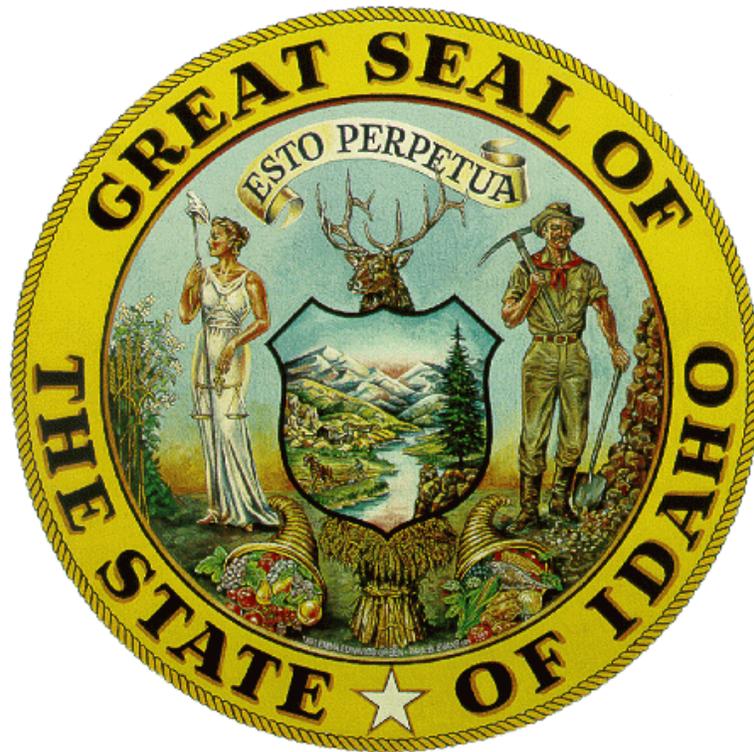


DIVISION OF BUILDING SAFETY

IDAHO ELECTRICAL BOARD
VIDEOCONFERENCE MEETING

JANUARY 24, 2013



IDAHO ELECTRICAL BOARD

Agenda Item No. 01

Agenda

PRESENTER: Bob Scott, Chairman

OBJECTIVE: Approve agenda for the January 24, 2013 Idaho Electrical Board Videoconference meeting.

ACTION: Consent

BACKGROUND:

**PROCEDURAL
HISTORY:**

ATTACHMENTS: January 24, 2013 Idaho Electrical Board meeting tentative agenda



TENTATIVE AGENDA

NOTICE OF PUBLIC MEETING

IDAHO ELECTRICAL BOARD VIDEOCONFERENCE MEETING

**Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian, Idaho
1250 Ironwood Drive, Suite 220, Coeur d'Alene, Idaho
2055 Garrett Way, Building 1, Suite 4, Pocatello, Idaho
dbs.idaho.gov – (208) 332-7137**

***Thursday, January 24, 2013
9:30 a.m. – 3:30 p.m. (MT)***

(Note: Meeting Commences at 8:30 a.m. PT)

9:30 a.m. CALL TO ORDER – Bob Scott, Chairman

- o Roll Call & Introductions
- o Open Forum

CONSENT AGENDA

1. Approval of January 24, 2013 Agenda
2. Approval of October 18, 2012 Board Meeting Minutes

ACTION AGENDA

3. Administrative Appeals Hearing – Rob Foster
 - a. Alpha Electric – NOV ELE1207-0054
 - b. Conrad Brothers of Idaho – NOV ELE1209-0068
 - c. George Katsilometes – NOV ELE1209-0070 and ELE1209-0071

INFORMATIONAL AGENDA

4. Negotiated Rulemaking--Amendment and Adoption of the 2014 NEC – Bob Scott
5. Labeling and Listing Proposal – Steve Keys

12 p.m. LUNCH BREAK (*If needed*)

6. Electrical Program Manager Report – Rob Foster

7. Operational Report – Steve Keys
8. Administrator Report
 - a. Financial Report – C. Kelly Pearce and Kathleen Watkins
 - b. Administrator – C. Kelly Pearce

3:30 p.m. ADJOURN

All times, other than beginning, are approximate and are scheduled according to Mountain Time (MT), unless otherwise noted. Agenda items may shift depending on Board preference. 12/07/12r

IDAHO ELECTRICAL BOARD

Agenda Item No. 02

Minutes

PRESENTER: Bob Scott, Chairman

OBJECTIVE: Approve minutes from the October 18, 2012 Idaho Electrical Board Videoconference meeting.

ACTION: Consent

BACKGROUND:

PROCEDURAL HISTORY:

ATTACHMENTS: October 18, 2012 Idaho Electrical Board draft minutes



**IDAHO ELECTRICAL BOARD
VIDEOCONFERENCE MEETING**

Thursday – October 18, 2012 – 9:00 a.m. (MT)

**Division of Building Safety
1090 East Watertower Street, Suite 150, Meridian, Idaho
1250 Ironwood Drive, Suite 220, Coeur d'Alene, Idaho
2055 Garrett Way, Building 1, Suite 4, Pocatello, Idaho**

***DRAFT MINUTES OF THE OCTOBER 18, 2012 MEETING**

**NOTE: The following report is not intended to be a verbatim transcript of the discussions at the meeting;
however, is intended to record the significant features of those discussions.**

Chairman Bob Scott called the meeting to order at 9:03 a.m. (MT).

Board Members Present:

Bob Scott, Chairman
Jeff Wheeler
Denis Duman
Tim Phillips
Dale Pippitt
Al Frieze
Allan Perman
Mark LaBolle

DBS Staff Members Present:

C. Kelly Pearce, Administrator
Steve Keys, Deputy Administrator-Operations
Ron Whitney, Deputy Administrator-Administration
Patrick Grace, Deputy Attorney General
Rob Foster, Electrical Program Manager
Rod Freligh, Regional Manager, Region 1
Chris Jensen, Regional Manager, Region 3
Kathleen Watkins, Financial Manager
Bill Hatch, Public Information Officer
Renee Bryant, Administrative Assistant 2/Board Secretary

Board Members Absent:

Kreg Davis

◆ **Open Forum**

Low Voltage/Communication Exemption – Addressed at the July Board meeting, Brian Stutzman, President of Business Phone Specialists, Inc., reiterated his legislative proposal with regard to low voltage/communication exemptions. Mr. Stutzman also brought forth an idea based upon a non-specified state that has adopted the National Electrical Code (NEC); empowering its inspectors to enforce all aspects of the code. The state originally exempted all utilities, homeowners, and other entities from requiring permits, inspections, fees, etc.; however, later expanded the exemption to all.

Apprenticeship Program – Adam Miller, Idaho Forest Group representative, stated it has been extremely difficult staffing journeymen in its electrical department. Upon researching Washington schools, the Idaho Forest Group has determined Perry Technical Institute best meets its training requirements. The only issue, when hiring an employee from the institute, is it only offers a two-year program and the state of Idaho requires a four-year apprenticeship program to become a journeyman.

Jason Lidke, representative for Perry Technical Institute, explained the school's two-year apprenticeship program.

Mr. Miller suggested possibly changing the definition from four years to curriculum-based or hourly-based; ensuring the same practices are taught in Washington and Idaho.

It was recommended Perry Technical Institute submit its curriculum to the state of Idaho, Division of Building Safety (DBS) and Board of Education for approval and analysis whether it satisfies their requirements as a curriculum.

◆ **Approval of the October 18, 2012 Agenda**

MOTION: Denis Duman made a motion to approve the agenda as presented. Jeff Wheeler seconded. All in favor, motion carried.

◆ **Approval of the July 19, 2012 Board Meeting Minutes**

MOTION: Denis Duman made a motion to approve the minutes as written. Allan Perman seconded. All in favor, motion carried.

◆ **Administrative Appeals Hearing**

Sweetwater Drilling, Inc. – NOV ELE1206-0096 – Mark Pitts represented Sweetwater Drilling, Inc., Electrical Program Manager Rob Foster represented DBS, and Deputy Attorney General Patrick Grace was the facilitator. DBS Building Safety Inspector/Advisor Gary Sonnen was a witness. All parties provided testimony and argument on NOV ELE1206-0096, violation of IDAPA 07.01.11.011.06 “Performance Outside Scope of License”. The Board upheld the \$100.00 penalty fee and Mr. Pitts was advised of his rights should he choose to appeal the decision.

MOTION: Al Frieze made a motion to uphold the Notice of Violation (NOV) as written. Denis Duman seconded. All in favor, motion carried.

ACTION: Patrick Grace will create a Final Written Order for Chairman Scott’s signature and provide a signed copy to Mr. Pitts.

Alpha Electric – NOV ELE1207-0054 – Due to an unforeseen circumstance, John Crane with Alpha Electric requested, and the Board agreed, to reschedule the appeal to the first meeting in 2013.

ACTION: Alpha Electric’s appeal, NOV ELE1207-0054, will be addressed at the Board’s January 2013 meeting.

◆ **Negotiated Rulemaking – Amendment and Adoption of the 2014 NEC**

The National Fire Protection Association (NFPA) will hold the 2014 NEC Report on Comments meeting, November 28 – December 8, 2012, in Redondo Beach, California.

A draft of the 2014 NEC is available for viewing at NFPA’s website <http://www.nfpa.org>. The Division was asked to post the draft code on its website as well.

ACTION: A link to NFPA’s website, to view the draft 2014 NEC, will be placed on the Division’s website.

A collaborative committee was created to discuss the 2014 NEC; coming up with a consensus of proposed amendments before it goes to the legislature. The Division will provide a facilitator, legislator, and one or two engineers to be on the committee.

MOTION: Al Frieze made a motion for DBS staff to assemble a collaborative group to determine whether to adopt the 2014 NEC and for Chairman Scott to appoint up to four board members to serve on the collaborative. Denis Duman seconded. All in favor, motion carried.

The following individuals volunteered: Mark LaBolle and Allen Perman, board members; Jeff Fitzloff, Underwriters Laboratory (UL); Mike Stone, National Electrical Manufacturers Association; Doug Poedy, city of Boise inspector; Tom Brown B & B Electric; and Aaron White, IBEW Local 291.

Bob Scott will ask Kreg Davis to participate on the committee. The meetings are open to all interested parties. It was suggested, and the Division agreed, to hold one or two meetings prior to the January 2013 Board meeting.

ACTION: Prior to the 2013 Board meeting, the Division will coordinate meetings with the collaborative committee.

◆ **Selective Coordination – Code Requirement**

Al Hewitt, Cooper Bussman, presented a proposal with regard to engineering supervision when selective coordination is required. The proposal adds language to NEC 240.12 *Electrical System Coordination*; assisting electrical inspectors to verify that systems will selectively coordinate when required. It would also require qualified persons to be the ones to design the systems.

◆ **Underwriters Laboratories (UL) Listings – Update**

The city of Moscow has been in contact with the manufacturer of the sign in question and is currently working to get it listed.

Jeff Fitzloff, UL, stated the sign will have to be field evaluated or taken down and returned to the manufacturer to be listed. Article 600 *Electric Signs and Outline Lighting* of the NEC requires the sign to be listed regardless of the rules in Idaho for electrical installation.

◆ **Contractor Licensing for “Big Box” Vendors**

As requested at the July 2012 Board meeting, Deputy Attorney General Patrick Grace addressed his legal opinion as to whether retail stores in Idaho need to obtain an electrical contractor’s license under Idaho law based upon the performance of certain electrical activities.

◆ **Electrical Program Manager Report**

Continuing Education Course Approval – Currently, DBS reviews continuing education courses for electrical. This is a time consuming and expensive process. DBS recommended, and the Board supported, courses be approved in the continuing education provider’s home state before the Division will even consider them.

◆ **Operational Report**

Staff Limitations – DBS is experiencing complications associated with growth; i.e., increase in demand, and limited staff/resources; however, is working to address those issues.

NFPA Meeting – In July, Steve Keys attended the NFPA meeting in Boston, Massachusetts. NFPA now offers free training to inspectors on code changes and code books are furnished to attendees.

Labeling and Listing Proposal – A great deal of machinery is being installed in the state of Idaho. Large corporations with credible safety programs would like to adopt North Carolina's provision to exempt industrial equipment from the field evaluation approval process. Smaller companies would like professional electrical engineers credentialed in the state of Idaho, to perform field evaluations on electrical equipment. NFPA 791 is the standard for industrial equipment.

NFPA is looking for an indication from the HVAC Board that it would view favorably along the lines of the authority having jurisdiction to approve unlisted equipment if field evaluations are performed and signed off by DBS staff; thus, not bringing in a third party. The Division would like to exercise that predicated upon situations where DBS staff is not comfortable, registered professional electrical engineers would sign off on the equipment. Ultimately, DBS would like to formalize a rule.

Jeff Wheeler asked, and Steve Keys agreed, to bring to the January 2013 meeting proposed legislation to provide standard criteria for the approval of electrical equipment and apparatus installed in Idaho.

ACTION: The Division will bring to the January 2013 meeting proposed legislation to clarify who has the authority to approve unlisted equipment installed in Idaho.

ACTION: The topic *Labeling and Listing Proposal* will be placed as an informational item on the January 2013 Board meeting agenda.

Cross-Referencing Permits – Effective November 12, 2012, DBS will only process cross-referenced permits under the following conditions: 1) Multi-family projects where there is a parent permit for the project and individual units cross-referenced to allow finals on those units, or 2) Death of a licensed plumbing or HVAC contractor.

Refunding Permits – Effective November 12, 2012, the Division will only issue a refund if: 1) Overpayment, 2) Duplicate permit, or 3) Job not in the state's jurisdiction.

◆ **DBS Investigation**

Chris Jensen provided a brief synopsis of an investigation conducted by DBS involving several electrocutions in eastern Idaho.

◆ **Schedule 2013 Meeting Dates**

The 2013 Electrical Board meeting dates are as follows: January 24th, April 25th, July 11th, and October 22nd. The meetings will commence at 9:30 a.m. (MT)/8:30 a.m. (PT).

MOTION: Al Frieze made a motion to approve the 2013 Idaho Electrical Board meeting dates. Dale Pippitt seconded. All in favor, motion carried.

◆ **Administrator Report**

Financial Report – Kathleen Watkins reviewed the Electrical Board Fund FY 2012 financial statement as of June 30, 2012, and FY 2013 financial statement as of August 31, 2012.

Changes in Workforce – Kelly Pearce made a PowerPoint presentation titled *Changes in Workforce*. The presentation consisted of charts comparing the average number of individuals working in residential and commercial construction, as registered with the Idaho Department of Labor (2007-2012); DBS budget-personnel reduction (2007-2012); and expenditures to appropriations (2005-2012).

Statutory Mandate--State Buildings – As mandated by statute, July 2011, the Division began the plan review, permitting, and inspection processes of state building construction throughout the state of Idaho.

Creative Revenue Enhancement FY 2012 – Kelly Pearce gave a PowerPoint presentation titled *Creative Revenue Enhancement FY 2012*. The presentation consisted of: Energy training, HVAC; energy efficiency compliance database, Governor’s Office of Energy Resources; energy efficiency study, Penn State University; building and plan review fees/inspections, cities of Ketchum and Hailey; electrical and mechanical inspections, city of Meridian; electrical inspections, as needed, city of Twin Falls; inspections, Coeur d’Alene, Nez Perce, Shoban, and Kootenai Tribes; and permit/inspection revenue, state buildings.

◆ **Adjournment**

MOTION: Dale Pippitt made a motion to adjourn. Mark LaBolle seconded. All in favor, motion carried.

The meeting adjourned at 2:42 p.m. (MT).

BOB SCOTT, CHAIRMAN
IDAHO ELECTRICAL BOARD

C. KELLY PEARCE, ADMINISTRATOR
DIVISION OF BUILDING SAFETY

DATE

DATE

*These DRAFT minutes are subject to possible correction and final approval by the Idaho Electrical Board 12/13/2012

IDAHO ELECTRICAL BOARD

Agenda Item No. 03a

Alpha Electric – NOV ELE1207-0054

PRESENTER: Rob Foster, Electrical Program Manager

OBJECTIVE: Administer a ruling on Alpha Electric’s appeal – NOV ELE1207-0054

ACTION: Affirm, reject, decrease or increase the imposed penalties

BACKGROUND: The Notice of Violation (NOV) was issued based upon a proposed violation to IDAPA 07.01.11.011.07 “Fees and Permits”.

PROCEDURAL HISTORY:

ATTACHMENTS: Documentation from John Crane, Alpha Electric, and the Division of Building Safety



IDAHO ELECTRICAL BOARD

Agenda Item No. 03b Conrad Brothers of Idaho – NOV ELE1209-0068

PRESENTER: Rob Foster, Electrical Program Manager

OBJECTIVE: Administer a ruling on Conrad Brothers of Idaho’s appeal –
NOV ELE1209-0068

ACTION: Affirm, reject, decrease or increase the imposed penalties

BACKGROUND: The Notice of Violation (NOV) was issued based upon a proposed violation to
IDAPA 07.01.11.011.07 “Fees and Permits”.

**PROCEDURAL
HISTORY:**

ATTACHMENTS: Documentation from Paul Conrad, Conrad Brothers of Idaho, and the Division
of Building Safety



IDAHO ELECTRICAL BOARD

Agenda Item No. 03c George Katsilometes – NOV ELE1209-0070 & ELE1209-0071

PRESENTER: Rob Foster, Electrical Program Manager

OBJECTIVE: Administer a ruling on George Katsilometes’s appeals – NOV ELE1209-0070 and ELE1209-0071

ACTION: Affirm, reject, decrease or increase the imposed penalties

BACKGROUND: Notice of Violations (NOV) ELE1209-0070 and ELE1209-0071 were issued based upon a proposed violation to IDAPA 07.01.11.011.01 “Electrical Contractor” for jobs at 68 W. Main and 73 W. Main, Lava Hot Springs, Idaho.

PROCEDURAL HISTORY:

ATTACHMENTS: Documentation from George Katsilometes and the Division of Building Safety



IDAHO ELECTRICAL BOARD

Agenda Item No. 04 Negotiated Rulemaking--Amendment and Adoption of the 2014 NEC

PRESENTER: Bob Scott, Chairman

OBJECTIVE: Seek information and comments from the Board and industry with regard to the adoption and amendments of the 2014 NEC.

ACTION: Informational

BACKGROUND: July 2012 – The Board approved a motion to begin the negotiated rulemaking process for the 2014 NEC.

October 2012 - A collaborative committee was created to discuss the 2014 NEC; coming up with a consensus of proposed amendments before it goes to the legislature. The Division will provide a facilitator, legislator, and engineers to be on the committee. Prior to the January 2013 Board meeting, the Division will coordinate meetings with the collaborative committee.

ATTACHMENTS: No documentation



IDAHO ELECTRICAL BOARD

Agenda Item No. 05

Labeling and Listing Proposal

PRESENTER: Steve Keys, Deputy Administrator-Operations

OBJECTIVE: Consider proposed legislation to provide standard criteria for the approval of electrical equipment and apparatus installed in Idaho.

ACTION: Informational

BACKGROUND: A great deal of machinery is being installed in the state of Idaho. Large corporations with credible safety programs would like to adopt North Carolina's provision to exempt industrial equipment from the field evaluation approval process. Smaller companies would like professional electrical engineers, credentialed in the state of Idaho, to perform field evaluations on electrical equipment. NFPA 791 is the standard for industrial equipment.

NFPA is looking for an indication from the HVAC Board that it would view favorably along the lines of the authority having jurisdiction to approve unlisted equipment if field evaluations are performed and signed off by DBS staff; thus, not bringing in a third party. The Division would like to exercise that predicated upon situations where DBS staff is not comfortable, registered professional electrical engineers would sign off on the equipment. Ultimately, DBS would like to formalize a rule.

Jeff Wheeler asked, and Steve Keys agreed, to bring to the January 2013 meeting proposed legislation to provide standard criteria for the approval of electrical equipment and apparatus installed in Idaho.

PROCEDURAL HISTORY:

ATTACHMENTS: Proposed legislation





Approval of Electrical Equipment In Idaho

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Introduction

Purpose

The purpose of this document is to provide standard criteria for the approval of electrical equipment and apparatus installed in Idaho. The National Electrical Code requires that all electrical equipment and apparatus be approved for its intended usage.

Approval Process Options

1. **Equipment listed by a Nationally Recognized Testing Laboratory (NRTL) as conforming to nationally recognized standards related to the products intended usage.**
2. **Equipment approved by the Authority Having Jurisdiction through the field evaluation process.**

Definitions

Approved Equipment – Equipment acceptable to the AHJ consisting of : (1) NRTL-listed equipment being used in accordance with its listing or labeling for the manufacturer's intended purpose; or (2) equipment that is approved by an Equipment Inspector as safe for its intended purpose.

Electrical Equipment- A general term, including material, fittings, devices, appliances, luminaires, apparatus, machinery, and the like used as a part of, or in connection with, an electrical installation. (NFPA 70-2008)

Equipment Inspector – A qualified electrical inspector or registered professional electrical engineer who has been determined by his/her AHJ or designee to have the skill, knowledge, and abilities to safely perform the work to which they are assigned. In addition they **shall** have knowledge of the applicable electrical safety requirements as well as demonstrated field experience in the design, installation, and/or operation of facility or R&D electrical systems. Performs field evaluations, approves, labels and documents electrical equipment installations and work.

Field Evaluation- The process used for unlisted or modified products that are not listed or labeled under a full listing and certification program. The process is completed at the point of manufacturing, interim points of distribution, in the evaluating company's facilities or at the final installation site or a combination of the above.

Modified Equipment – NRTL-listed or Approved electrical equipment that has been modified or is being used for a purpose other than intended by the manufacturer/builder. Modification means that a change has been made that affects the safety of the equipment or is not in accordance with the manufacturers/builders installation use or maintenance instructions.

Nationally Recognized Testing Laboratory (NRTL) – An organization (e.g., UL, CSA):

That is recognized by OSHA in accordance with Appendix A of 29 CFR 1910.7;

That tests for safety;

That lists, labels, or accepts equipment or materials that meet all of the criteria in 29 CFR 1910.7(b)(1)-(b)(4);

That is concerned with the evaluation of products or services;

That maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services; and

Whose listing states that the equipment, material, or services either meet appropriate designated standards or have been tested and found suitable for a specified purpose.

NRTL-Listed Equipment – Equipment, included in a list published by an NRTL and used in accordance with any instructions included in the listing/labeling for its intended purpose by the manufacturer.

Unlisted Equipment – Equipment that has not been listed by an NRTL.

Field Evaluation

Scope

Field Evaluation and approval of unlisted electrical equipment applies to electrical equipment installed in Idaho. All *unlisted* or *modified NRTL-listed* electrical equipment requires Field Evaluation and approval prior to use. These requirements apply as follows:

New equipment approvals **shall** follow the provisions of this document.

Equipment previously accepted as approved without field examination **shall** be approved following the provisions of this document.

Re-approvals of equipment previously approved **should** follow the provisions of this document. Re-approvals may include previously approved equipment that has been modified or is used outside of its original intent.

Equipment that was previously evaluated, labeled and documented does not need to be approved again to meet these requirements.

The following types of electrical equipment **do not require field evaluation and approval**:

Prototype equipment (e.g., test chassis, bench top experiment) built to test the validity of a design that is under the exclusive control of the designer if used for less than three months. An Equipment Inspector should be consulted at the beginning of the development stage and as necessary to ensure that all appropriate electrical safety requirements are being met (e.g., guarding, work control (EEWP], etc.) Equipment being developed that exceeds a three-month period may be acceptable as long as a Equipment Inspector is informed of the equipment and the status of the design/development and safety continues to be covered by adequate work control.

The following equipment **does not need to be disassembled/opened for approval**. However, no hazard should be present to the worker, as can best be determined by external Field Evaluation. Other evaluations shall be substituted for the inability to visual inspection e.g. review of schematics, assembly drawings etc.

Equipment that will be rendered inoperative as a result of Field Evaluation.

Equipment that will void the manufacturer's warranty upon opening.

Equipment manufactured by a reputable manufacturer as defined in this document.

Equipment that could present additional hazards to the EQUIPMENT INSPECTOR upon opening, e.g., radiological hazards.

Section 1—Field Evaluation/Documentation Criteria

Field Evaluation of unlisted electrical equipment **shall** be documented. The documentation and Field Evaluation criteria as applicable **shall** be done as specified in this section.

1.1 Non-NRTL Listed/Modified NRTL-Listed Electrical Equipment

Documentation (See Example Appendix A) shall include as appropriate:

Equipment Owner name

Equipment Name

Equipment Manufacturer

Equipment model number

Equipment serial number and property number if applicable

Equipment location (optional)

Equipment status: new, modified, not previously approved, in-use, etc.

Equipment Type(optional):

- Stand-alone custom built, or non reputable
- System
- Powered rack
- Appliances and electrical tools
- Powered Workbench
- Extension cords and relocatable power taps
- Other

Function

Usage:

- Operating Environment

Conditions of Usage/comments

EQUIPMENT INSPECTOR tracking number if equipment is approved.

Date examined and approved/rejected

Name of EQUIPMENT INSPECTOR who examined and approved/rejected the equipment

Non-NRTL/modified NRTL-listed electrical equipment **shall** be examined at a minimum, checking for the following items as appropriate:

External Inspection:

- Enclosure
 - Operator not exposed to any hazard
 - Not damaged
 - Appropriate material
 - Protects contents from operating environment
 - Will contain any arcs, sparks, electrical explosion
- Power Source
 - Cords and Plugs
 - Proper voltage and ampacity rating for plug and cord
 - Grounding conductor included if required
 - Not frayed or damaged

- Proper wiring of plug
 - Strain relief on cord
 - Direct wired into facility
 - Proper voltage and ampacity rating for wiring method
 - Installation according to NEC
 - Proper loading and overcurrent protection in branch circuit
 - Grounding
 - Ground from cord or other is properly terminated
 - All non-current-carrying exposed metal is properly bonded
 - All non-current-carrying internal subsystems are properly bonded
 - Equipment ground is run with circuit conductors
 - Auxiliary ground permitted
 - Check termination
 - Foreign Power Supplies and Equipment
 - Connected to facility power with appropriate NRTL listed adapters
 - Correct voltage, frequency, and phasing
 - Correct wire ampacity for U.S. use
 - Overcurrent Protection
 - Adequate overcurrent protection? in equipment, or branch circuit
 - Marking Requirements
 - Hazards, including stored energy
 - Power requirements (Voltage, current, frequency, power)
 - Make/model/drawing number
 - Restrictions and limitations of use
 - Other Requirements
 - Documentation adequate
 - Procedures to use (IWD)
 - Secondary Hazards
 - RF hazards
 - DC electric or magnetic fields
 - IR, visible or UV
 - X-rays
 - Fire, electrical explosion
- Internal inspection:
- Internal Wiring
 - Polarity
 - Phasing
 - Landing of ground
 - Separate line voltage and high voltage from low voltage
 - Wiring terminals and leads
 - Wire size
 - Proper dielectric
 - Clearance/creepage distances for high voltage
 - Listed conductors, if applicable

- Other Internal Issues
 - Neat workmanship
 - Listed components used, if applicable
 - Free of sharp edges
 - Proper cooling
 - Automatic discharge of high voltage capacitor

Tests performed as deemed appropriate by Equipment Inspector

- Ground continuity (less than an ohm)
- Polarization of cord and plug
- Auto discharge of high voltage capacitor
- Functional Tests (e.g. GFCI, emergency shut-off etc.)

Failure Analysis

- Effect of ground fault
- Effect of short circuit
- Effect of interlock failure
- Effect of overload
- Effect of incorrect setting

Maintenance

- Any safety issues with access and maintenance

1.2 Multiple Identical Model Units

For approving multiple units of identical model units the following may be done:

At least two units shall be Field Evaluated and documented in accordance with the appropriate sections of this chapter as follows:

- For Non-NRTL listed/modified NRTL-listed electrical equipment, follow in-house built/modified NRTL-listed electrical equipment requirements (Section 1.1).

The remaining units may be assumed to be built identically and approval granted after visual Field Evaluation of the outside of each unit has been complete to ensure it is the same make and model and has not been damaged or modified. This Field Evaluation shall be performed by an EQUIPMENT INSPECTOR. Each identical unit approved shall be recorded in the original approval documentation.

Section 2—Equipment Field Evaluation Numbering

Approved electrical equipment **shall** be assigned a Field Evaluation document file number. (e.g. an approving assignment number, bar code etc.)

2.1 Multiple Identical Model Units

Multiple units from a manufacturer with identical models may have the Field Evaluation document file number assigned as follows:

The same approving assignment number, bar code etc. may be used for multiple identical make and model units/systems.

The serial number (if available) or other unique identifier of each identical model unit/system identified as approved **shall** be documented on the same approval form used to document the approval of the representative sample as specified in Section 1.4.

Section 3—Labeling Approved Electrical Equipment

Approved electrical equipment shall be labeled (See Examples Appendix F). The approval label shall be green. The label shall be placed in a conspicuous (clearly visible) location ***The Field Evaluation number shall be on the equipment or the label.*** (Note: *Environmental considerations should be made to prevent label deterioration*).

3.1 NRTL-Listed Electrical Equipment (Recommended Practice)

A label that indicates the equipment is NRTL listed **should** be applied to NRTL-listed electrical equipment under the following conditions:

The NRTL symbol (See <http://www.osha.gov/dts/otpca/nrtl/nrtlmrk.html>) is not in a conspicuous location (e.g., you cannot readily view it because the item is inaccessible in a rack or you need to open/disassemble the equipment enclosure to see the NRTL symbol, etc.).

The NRTL symbol(s) is difficult to read.

3.2 Multiple Identical Model Units

All multiple identical model units documented, tracked, and approved following the provisions of Sections 1 and 2 shall be labeled.

Appendix A: Non-NRTL /Modified NRTL-Listed Electrical Equipment Approval Form

PART 1

| | | |
|---|---------------------------------------|---------------------------------|
| Group: | Responsible Person (optional): | Badge etc. # (optional): |
| Equipment Name: <input type="checkbox"/> Multiple <input type="checkbox"/> Single | | |
| Manufacturer: | | |
| Model Number: | | |
| Serial Number of Piece Equipment Actually Evaluated (See Attached for Additional Serial Numbers of identical equipment): | | |
| Property Number of Piece of Equipment Actually Evaluated (See attached for additional Property Numbers of identical equipment): | | |
| Location (optional) | TA: | Bldg: |
| Room: | | |
| Identify Equipment Status : <input type="checkbox"/> New <input type="checkbox"/> Modified <input type="checkbox"/> Not Previously Approved <input type="checkbox"/> In Use | | |
| Equipment Type: <input type="checkbox"/> Stand-alone custom built or non-reputable <input type="checkbox"/> System <input type="checkbox"/> Powered rack <input type="checkbox"/> Appliance/electrical tools <input type="checkbox"/> Powered workbench <input type="checkbox"/> Extension cord/relocatable power taps <input type="checkbox"/> Other | | |
| Function: | | |
| Operating Environment: <input type="checkbox"/> Indoor/Dry <input type="checkbox"/> Outdoor/wet/damp <input type="checkbox"/> Flammable vapor/dust/flyings <input type="checkbox"/> Explosives powder/solid | | |

PART 2

| | |
|---|---|
| External Inspection | |
| Enclosure: | Foreign Power Supplies and Equipment: |
| Operator not exposed to any hazard: <input type="checkbox"/> NA: <input type="checkbox"/> | Connected to facility power with appropriate adapters: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Not damaged: <input type="checkbox"/> NA: <input type="checkbox"/> | Correct voltage, frequency and phasing: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Appropriate material: <input type="checkbox"/> NA: <input type="checkbox"/> | Correct wire ampacity for U.S. use: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Protects contents fro operating environment: <input type="checkbox"/> NA: <input type="checkbox"/> | Overcurrent Protection: |
| Will contain any arcs, sparks, electrical explosions: <input type="checkbox"/> NA: <input type="checkbox"/> | Adequate Overcurrent protection: Equipment <input type="checkbox"/> Branch circuit <input type="checkbox"/> NA: <input type="checkbox"/> |
| | |
| Power Source-cord and plugs: | |
| Proper voltage and ampacity rating for plug and cord: <input type="checkbox"/> NA: <input type="checkbox"/> | Marking Requirements: |
| Grounding conductor included if required (to bond metallic enclosure etc.): <input type="checkbox"/> NA: <input type="checkbox"/> | Hazards, including stored energy: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Not frayed or damaged: <input type="checkbox"/> NA: <input type="checkbox"/> | Power requirements (watts, voltage, current, frequency): <input type="checkbox"/> |
| Proper wiring of plug: <input type="checkbox"/> NA: <input type="checkbox"/> | Restriction and limitations of use: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Strain relief on cord: <input type="checkbox"/> NA: <input type="checkbox"/> | |
| Power Source-Direct wire into facility: | Other Requirements: |
| Proper voltage and ampacity rating for wiring method: <input type="checkbox"/> NA: <input type="checkbox"/> | Documentation adequate: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Installation according to NEC: <input type="checkbox"/> NA: <input type="checkbox"/> | Procedures to use (IWD): Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Proper loading and overcurrent protection in branch circuit: <input type="checkbox"/> NA: <input type="checkbox"/> | Training and qualification to use: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Grounding External/Internal: | Secondary Hazards: |
| Ground from cord or other is properly terminated: <input type="checkbox"/> NA: <input type="checkbox"/> | Rf hazards: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| All non-current carrying exposed metal is properly bonded: <input type="checkbox"/> NA: <input type="checkbox"/> | dc electric or magnetic fields: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| All non-current carrying internal subsystems are properly bonded: <input type="checkbox"/> NA: <input type="checkbox"/> | IR, visible or UV: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Equipment ground is run with circuit conductors: <input type="checkbox"/> NA: <input type="checkbox"/> | X-rays: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Auxiliary ground permitted: <input type="checkbox"/> Check Termination: <input type="checkbox"/> NA: <input type="checkbox"/> | Fire, electrical explosion: <input type="checkbox"/> NA: <input type="checkbox"/> |
| | |

PART 2 (Continued)

| | |
|---|---|
| (Internal Inspection) | |
| Internal Wiring: | Tests Performed: |
| Polarity correct: <input type="checkbox"/> NA: <input type="checkbox"/> | Ground continuity: <input type="checkbox"/> (less than 1 ohm) |
| Phasing correct: <input type="checkbox"/> NA: <input type="checkbox"/> | Polarization of cord and plug: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Landing of ground correct: <input type="checkbox"/> NA: <input type="checkbox"/> | Auto discharge of high voltage capacitor: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Separate line voltage and high voltage from low voltage: <input type="checkbox"/> NA: <input type="checkbox"/> | Function Test (e.g. GFCI, emergency shut-off): <input type="checkbox"/> NA: <input type="checkbox"/> |
| Wiring terminals and leads ok: <input type="checkbox"/> NA: <input type="checkbox"/> | |
| Wire size: <input type="checkbox"/> NA: <input type="checkbox"/> | |
| Proper dielectric: <input type="checkbox"/> | Failure Analysis: |
| Clearance/creepage distances for high voltage ok: <input type="checkbox"/> NA: <input type="checkbox"/> | Effect of ground fault: <input type="checkbox"/> |
| Listed conductors, if applicable: <input type="checkbox"/> NA: <input type="checkbox"/> | Effect of short circuit: <input type="checkbox"/> |
| Other Internal Issues: | Effect of interlock failure: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Neat workmanship: <input type="checkbox"/> | Effect of overload: <input type="checkbox"/> |
| Listed components used, if applicable: <input type="checkbox"/> NA: <input type="checkbox"/> | Effect of incorrect setting: <input type="checkbox"/> NA: <input type="checkbox"/> |
| Free of sharp edges: <input type="checkbox"/> NA: <input type="checkbox"/> | Maintenance: |
| Proper cooling: <input type="checkbox"/> NA: <input type="checkbox"/> | Any safety issues with access and maintenance: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Automatic discharge of high voltage capacitor: <input type="checkbox"/> NA: <input type="checkbox"/> | |
| | |
| | |
| | |
| | |
| | |

| PART 3 | APPROVE | REJECT |
|---|---------|--------|
| 1. Suitability for installation and use in conformity with 29 CFR 1910 Subpart S and/or NEC. | | |
| 2. Mechanical strength and durability, including for parts designed to enclose and protect other equipment, the adequacy of the protection thus provided. | | |
| 3. Wire bending and connection space. | | |
| 4. Electrical insulation. | | |
| 5. Heating effects under normal conditions of use and also under abnormal conditions likely to arise in service. | | |
| 6. Arcing effects. | | |
| 7. Classification by type, size, voltage, current capacity, and specific use. | | |
| 8. Other factors that contribute to the practical safeguarding of persons using or likely to come in contact with the equipment. | | |
| EQUIPMENT INSPECTOR Tracking Number of Piece of Equipment Actually Evaluated (See attached for additional EQUIPMENT INSPECTOR Tracking numbers of identical equipment if individual numbers were assigned): | | |

CONDITIONS OF USE: Indoor Only Damp/Wet Locations Hazardous Classified Locations (Flammable/Explosive)

COMMENTS (Include all designer/builder instructions, drawings or information that is relevant to the safe installation and use of this equipment. Attach additional sheets as necessary.):

NOTE: APPROVED EQUIPMENT SHALL BE INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BY THE DESIGNER/BUILDER AND EQUIPMENT INSPECTOR.

Condition of Usage (Include all designer/builder instructions, drawings or information that is relevant to the safe installation and use of this equipment. Attach additional sheets as necessary.)

This equipment is APPROVED for installation or use. IF THIS EQUIPMENT IS MODIFIED, DAMAGED, OR UTILIZED FOR OTHER THAN THE INTENDED USE STATED ABOVE, THIS APPROVAL IS VOID, PENDING REFIELD EVALUATION.

| DATE: | EQUIPMENT INSPECTOR Printed Name: | EQUIPMENT INSPECTOR Signature: |
|--------------|--|---------------------------------------|
| | | |

This equipment is REJECTED for use (See Comments Above.).

| Date: | EQUIPMENT INSPECTOR Printed Name: | EQUIPMENT INSPECTOR Signature: |
|--------------|--|---------------------------------------|
| | | |

Appendix F: EXAMPLE APPROVAL LABELS

| |
|--|
| APPROVED ELECTRICAL SAFETY By: _____ Date: _____ Signature: _____ |
|--|

IDAPA 07
TITLE 01
CHAPTER 10

**07.01.10 – RULES GOVERNING CERTIFICATION AND APPROVAL OF
ELECTRICAL PRODUCTS AND MATERIALS**

000. LEGAL AUTHORITY.

The Idaho Electrical Board is authorized under Sections 54-1001 and 54-06(500, Idaho Code, to adopt rules concerning certification and approval of electrical products and materials. (2-26-93)

001. TITLE AND SCOPE.

01. Title. These rules shall be cited as IDAPA07.01.10, “Rules Governing Certification and Approval of Electrical Products and Materials,” Division of Building Safety. (2-26-93)

02. Scope. These rules prescribe criteria for the certification and approval of electrical products and materials. (2-26-93)

002. WRITTEN INTERPRETATIONS.

This agency has no written interpretations of this chapter. *Approval of electrical products and materials shall be conducted in accord with “APPROVAL OF ELECTRICAL EQUIPMENT IN IDAHO”, as approved by the Idaho Electrical Board and published by the Division of Building Safety.* (2-26-93)

003. ADMINISTRATIVE APPEALS.

This chapter does not allow administrative relief of the provisions outlined herein. (2-26-93)

004. – 010. (RESERVED)

011. CERTIFICATION AND APPROVAL OF ELECTRICAL PRODUCTS AND MATERIALS.

In the state of Idaho, all materials, devices, fittings, equipment, apparatus, fixtures, and appliances installed or to be used in installations that are supplied with electrical energy shall be approved in one (1) of the following *methods*: (2-26-93)

01. Testing Laboratory. Be tested, examined, and certified (Listed) by an ~~accredited electrical product~~ *Nationally Recognized Testing Laboratory (NRTL)*. The Division of Building Safety, Electrical Bureau, shall maintain and up to date list of products and equipment approved by such testing laboratories as well as an updated list of accredited products which will be used and installed in accordance with the certification (Listing). (12-17-92)

02. Approval of Electrical Inspector ~~FIELD EVALUATION~~. Be approved by the *an equipment inspector approved by the authority having jurisdiction (AHJ) in conformance with the field evaluation provisions of “APPROVAL OF ELECTRICAL EQUIPMENT IN IDAHO”*, electrical inspector provided such an assembly, product, or equipment is installed under an electrical permit issued by the Division of Building Safety, Electrical Bureau, and conforms to the National Electrical Code and recognized industry standards. Where in the judgment of the Electrical Bureau a field evaluation is necessary to determine the acceptability of the assembly, product, or equipment to recognized industry standards, this field evaluation shall be completed by an accredited electrical product testing laboratory. The Division of Building Safety, Electrical Bureau, shall maintain a list of accredited electrical testing laboratories approved to complete such field evaluations. Such approval shall not be required for types of products that are regularly certified (Listed) or for certified (Listed) products as determined by the list maintained by the Division of Building Safety, Electrical Bureau. Such approval shall be obtained prior to installation *Energization of the assembly, product, or equipment*. If approval is denied, the particular reasons for denial shall be stated through the issuance of a notice of defects pursuant to Section 54-1004, Idaho Code. (12-17-92)

IDAHO ELECTRICAL BOARD

Agenda Item No. 06

Program Manager Report

PRESENTER: Rob Foster, Electrical Program Manager

OBJECTIVE: Update the Board on the Electrical program's current activities.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho Electrical Board meetings.

**PROCEDURAL
HISTORY:**

ATTACHMENTS: No documentation



IDAHO ELECTRICAL BOARD

Agenda Item No. 07

Operational Report

PRESENTER: Steve Keys, Deputy Administrator-Operations

OBJECTIVE: Update the Board on the operations of the Electrical program and Division.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho Electrical Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: No documentation



IDAHO ELECTRICAL BOARD

Agenda Item No. 08a

Financial Report

PRESENTER: C. Kelly Pearce, Administrator and Kathleen Watkins, Financial Manager

OBJECTIVE: Review the Idaho Electrical Board's Financial Report

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho Electrical Board meetings.

PROCEDURAL HISTORY:

ATTACHMENTS: Financial Report





Division of Building Safety
 ELECTRICAL BOARD FUND 0229-01
 Fiscal Year 2013 Financial Statements
 As of 12/31/2012

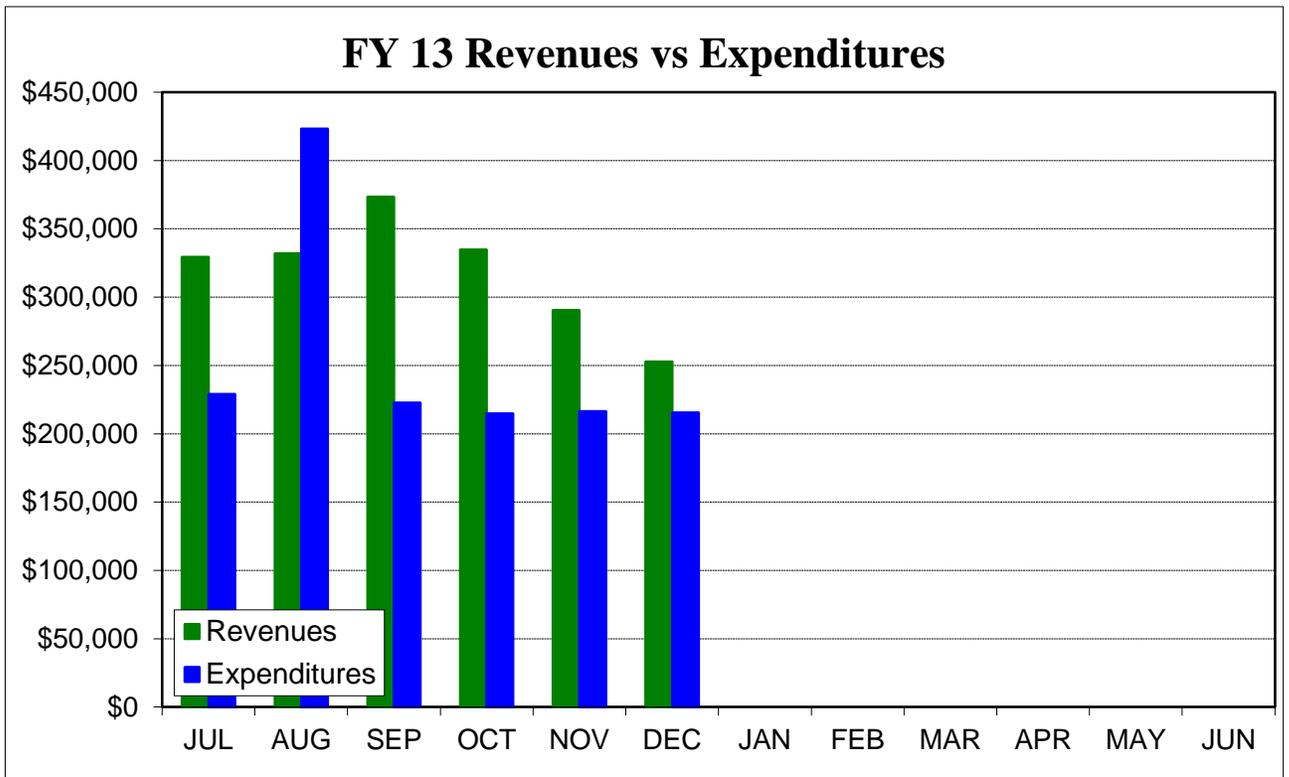
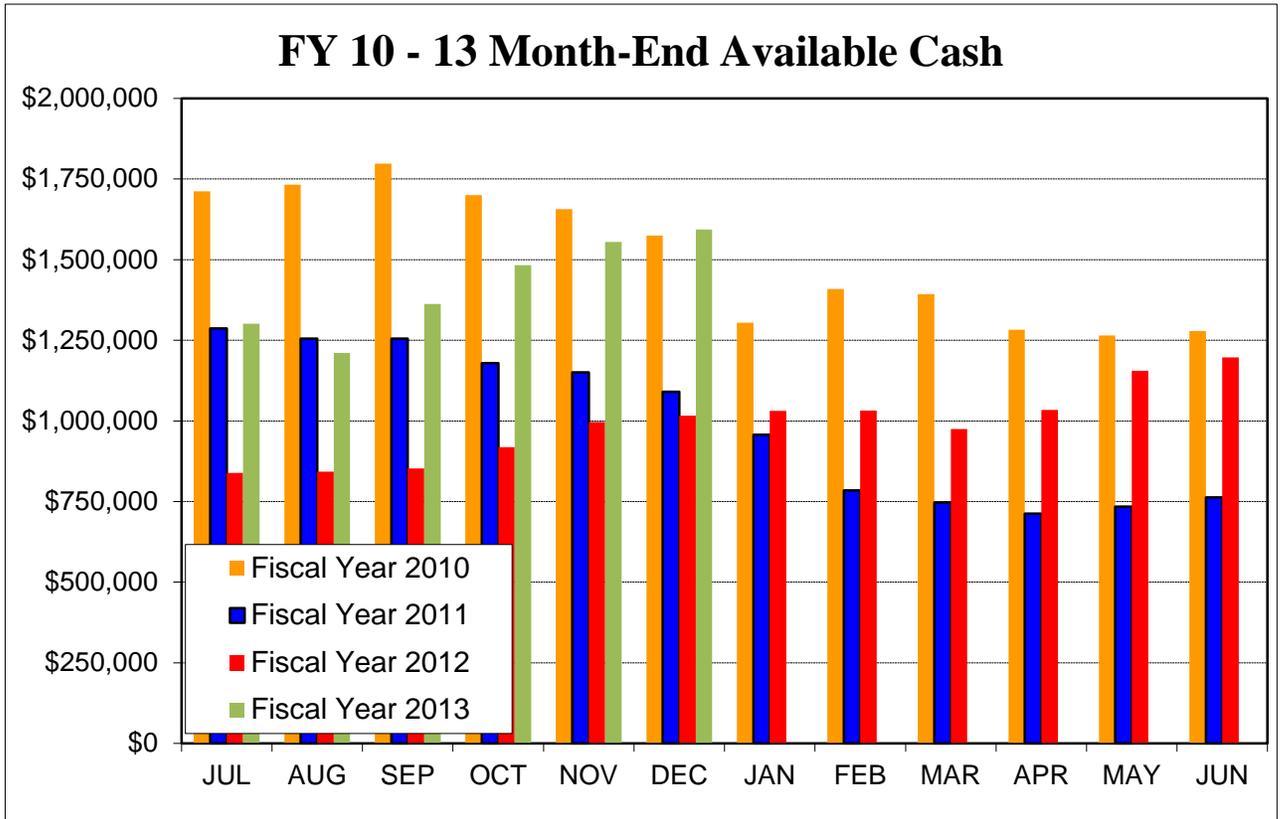
Statement of Revenues and Expenditures

| Class | Budget | Fiscal Year To Date | YTD as a % of Budget | Remaining Budget | Projected for Remainder of Year | Projected Year End Totals | Projected Total as a % of Budget |
|--------------------|-----------|---------------------|----------------------|------------------|---------------------------------|---------------------------|----------------------------------|
| Revenues: | 3,097,000 | 1,912,462 | 61.8% | 1,184,538 | 1,577,457 | 3,489,919 | 112.7% |
| Expenditures | | | | | | | |
| Personnel: | 2,041,000 | 1,083,309 | 53.1% | 957,691 | 1,104,406 | 2,187,714 | 107.2% |
| Operating: | 598,000 | 344,224 | 57.6% | 253,776 | 314,882 | 659,106 | 110.2% |
| Capital: | 163,000 | 94,003 | 57.7% | 68,997 | 68,997 | 163,000 | 100.0% |
| Total Expenditures | 2,802,000 | 1,521,536 | 54.3% | 1,280,464 | 1,488,285 | 3,009,821 | 107.4% |
| Net for FY 2013 | 295,000 | 390,926 | | | 89,172 | 480,099 | |

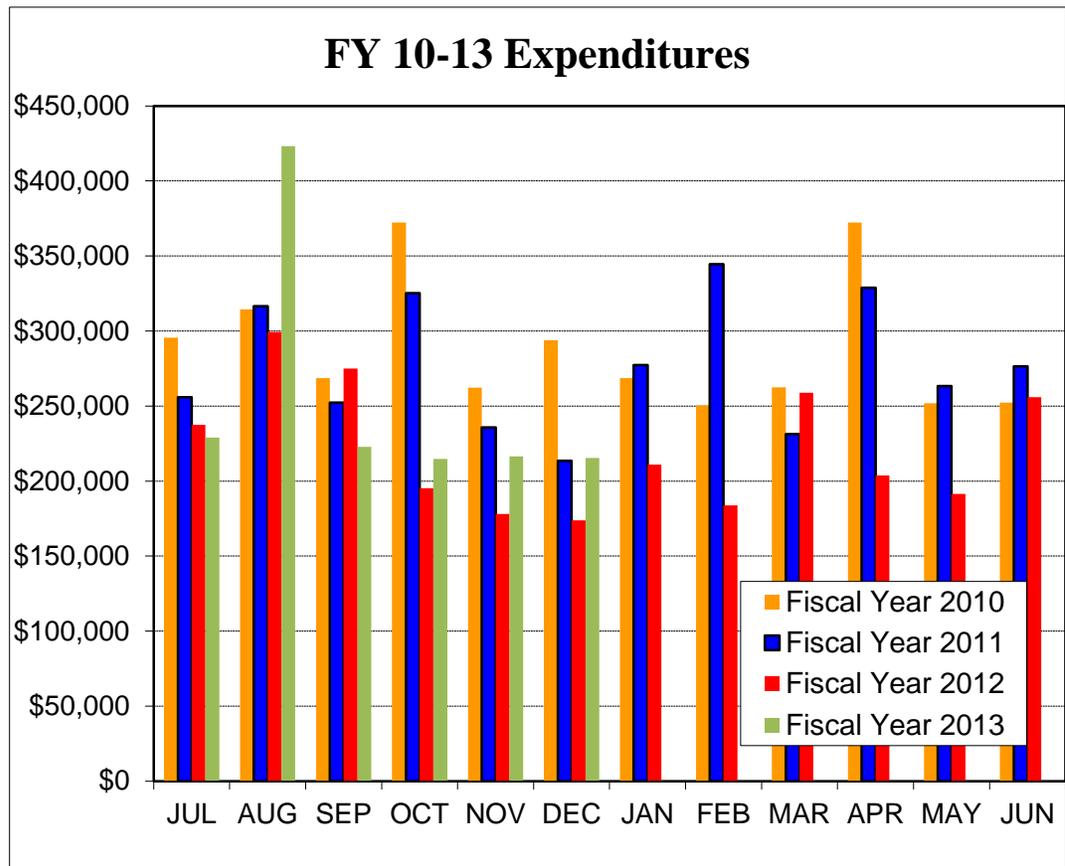
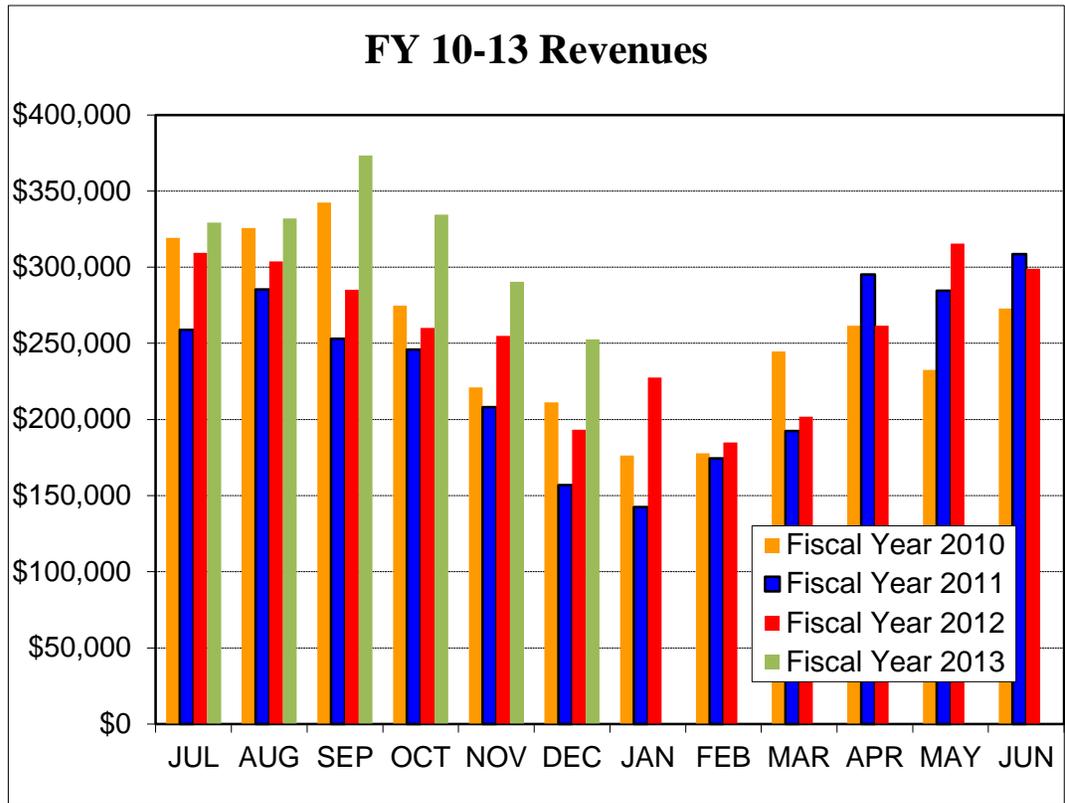
Statement of Cash Balance

| July 1, 2012 Beginning Cash Available | Fiscal Year to Date Revenues | Fiscal Year to Date Expenditures and Encumbrances | Other Changes in Cash | Available Cash as of December 31, 2012 | Projected Change in Cash for Remainder of Year | Projected Year End Available Cash |
|---------------------------------------|------------------------------|---|-----------------------|--|--|-----------------------------------|
| 1,196,822 | 1,912,462 | (1,521,536) | 4,534 | 1,592,282 | 89,172 | 1,681,454 |

ELECTRICAL BOARD FUND 0229-01



ELECTRICAL BOARD FUND 0229-01



IDAHO ELECTRICAL BOARD

Agenda Item No. 08b

Administrator

PRESENTER: C. Kelly Pearce, Administrator

OBJECTIVE: Provide the Board with an overview of the Division's current activities.

ACTION: Informational

BACKGROUND: This topic is addressed at all regularly scheduled Idaho Electrical Board meetings.

**PROCEDURAL
HISTORY:**

ATTACHMENTS: No documentation

