MONDAY March 21, 2011

To: Honorable Mayor and City Council

From: Mitch Humble, Community Development Director

Request:

Consideration of an ordinance amending City Code Section 4-2-2 regarding the electrical permit exception for low voltage signal circuits.

Time Estimate:

The staff presentation will take approximately 10 minutes. After the presentation, time will be needed discussion.

Background:

Idaho Code 54-1001B says that cities that have adopted electrical installation standards can only do so if the provisions of the National Electric Code (NEC) are used as a minimum installation standard and if the city actually inspects such installations. We have adopted the NEC as our minimum installation standard. However, City Code currently exempts signaling circuits under 100 volt amperes from inspection requirements. The effect of this exemption is that there are electrical installations, including fire alarm and nurse call systems, being installed without being permitted and inspected. This lack of inspection is a problem because the NEC contains minimum installation standards for these types of installations and Idaho Code requires the City to inspect installations for minimum NEC compliance. Our current exception for signal circuits less than 100 volt amperes is a violation of Idaho Code.

In addition to being a violation of Idaho Code, the exemption may also allow improper installations to occur. In multiple instances, the City's electrical inspector has discovered unpermitted installations that did not meet current NEC standards. Since the signaling circuits that are exempt from being inspected include installations in schools, hospitals, theaters and other similar public places, improper installations could present significant life safety risks.

If these installations were required to be permitted, electrical inspections would be performed. Unsafe wiring that does not meet NEC standards would be discovered and corrected. Therefore, staff proposes amending City Code 4-2-2 to require these types of signaling system installations to be inspected. City Code 4-2-2 currently reads as follows:

4-2-2: SUPERVISION OF ELECTRICAL INSTALLATIONS:

The city shall appoint a qualified electrical inspector for the city and the inspector shall be responsible for the inspection of all electrical installations hereinafter installed within the corporate limits of the city and the area of impact, with the following exceptions:

(A) Electrical public utilities companies in the installation and maintenance of their own lines and equipment.

(B) All signal and communication circuits of less than (100) volt amperes.

The second exception includes fire and other alarm systems as "signal circuits". Staff recommends that the second exemption be revised to read as follows:

(B) All ~~signal and~~ communication circuits ~~of less than (100) volt amperes~~, wires and apparatus.

This change would require signal installations of any measure to obtain inspections. A permit would be required to ensure the inspections are performed. However, the change leaves in place the exemption for communication installations, such as phone or data lines. The proposed change will make this City Code section compliant with Idaho Code and will help ensure that these types of electrical installations meet minimum NEC standards. The change will also bring the City Code into alignment with the wording and permitting requirements of the State of Idaho and other local jurisdictions within the State.

Idaho Administrative Code ADAPA 07.01.04.014 defines the scope of work allowed with each specialty electrical license. The "Limited Energy Electrical License" deals specifically with the electrical circuits this change seeks to address. Electrical wiring and equipment for one (1) or two (2) family dwellings, landscape sprinkler controls and other specified systems are exempted from licensing requirements. If the installation is exempted from licensing it is also exempted from permitting requirements. The City of Twin Falls would take a similar approach.

Approval Process:

The Building Inspections Department Advisory Committee, which is made up of eight members of the building community and one at-large member, has discussed this issue at its last two meetings. The Committee believes the change described should be made and unanimously recommended approval of the request to the City Council. Upon receiving this recommendation from the Committee, the Council may consider the recommendation and make a decision. If the Council approves the request, an ordinance amending City Code 4-2-2 has been prepared and is attached and ready for adoption tonight's meeting.

Budget Impact:

Approval of this request will increase the types of electrical jobs that require an electrical permit and subsequent inspections. Increased permits will bring additional revenue to the department. It is difficult to estimate the amount of additional revenue. Since these types of jobs do not currently require permits, staff does not have a record of how many there might be.

Regulatory Impact:

Approval of this request will mean that low voltage signal electrical jobs will require an electrical permit and inspections, like they do in other jurisdictions around the State. Approval will also bring the City Code into compliance with Idaho Code regarding the requirement to inspect electrical installations for minimum NEC compliance.

Conclusion:

The Building Inspections Department Advisory Committee recommends that the Council approve the request as submitted and adopt the attached ordinance.

Attachments:

1. Proposed Ordinance No. 3002
2. Idaho Code 54-1001B
3. Idaho Administrative Code, IDAPA 07, Chapter 4
4. Idaho Code 54-1001, Declaration of Policy
5. Idaho Code 54-1016, Exemptions
6. Pocatello Code 15.08.010
7. City of Twin Falls Electrical Permit Fee Schedule

ORDINANCE NO. 3002

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TWIN FALLS, IDAHO, AMENDING TWIN FALLS CITY CODE §4-2-2, PROVIDING FOR SUPERVISION OF ELECTRICAL INSTALLATIONS.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF TWIN FALLS, IDAHO:

That Twin Falls City Code §4-2-2 is amended as follows:

"4-2-2: SUPERVISION OF ELECTRICAL INSTALLATIONS:

The city shall appoint a qualified electrical inspector for the city and the inspector shall be responsible for the inspection of all electrical installations hereinafter installed within the corporate limits of the city and the area of impact, with the following exceptions:

(A) Electrical public utilities companies in the installation and maintenance of their own lines and equipment.

(B) All ~~signal~~ ~~and~~ communication circuits ~~of less than (100) volt amperes~~, wires and apparatus."

PASSED BY THE CITY COUNCIL, , 2011.

SIGNED BY THE MAYOR , 2011.

_____
MAYOR

ATTEST:

_____
DEPUTY CITY CLERK

Idaho Statutes

TITLE 54
PROFESSIONS, VOCATIONS, AND BUSINESSES

CHAPTER 10
ELECTRICAL CONTRACTORS AND JOURNEYMEN

54-1001B.INSPECTION PROVISIONS INAPPLICABLE WHEN INSTALLATION COVERED BY MUNICIPAL ORDINANCE. The provisions of this act relating to state inspection, except as provided in section 54-1001C, shall not apply within the corporate limits of incorporated cities and villages which, by ordinance or building code, prescribe the manner in which wires or equipment to convey current and apparatus to be operated by such current shall be installed, provided that the provisions of the National Electrical Code are used as the minimum standard in the preparation of such ordinances or building codes and provided that actual inspections are made.

The Idaho Code is made available on the Internet by the Idaho Legislature as a public service. This Internet version of the Idaho Code may not be used for commercial purposes, nor may this database be published or repackaged for commercial sale without express written permission.

The Idaho Code is the property of the state of Idaho, and is copyrighted by Idaho law, I.C. § 9-350. According to Idaho law, any person who reproduces or distributes the Idaho Code for commercial purposes in violation of the provisions of this statute shall be deemed to be an infringer of the state of Idaho's copyright.

IDAHO ADMINISTRATIVE CODE
IDAPA 07: DIVISION OF BUILDING SAFETY
TITLE 01
CHAPTER 04: RULES GOVERNING ELECTRICAL SPECIALTY LICENSING
DIVISION OF BUILDING SAFETY

IDAPA 07.01.04.014. ELECTRICAL SPECIALTIES REQUIRING A SPECIAL LICENSE.

The following shall be considered as electrical specialties, the practice of which shall require a special license: Effective Date: (4-9-79)

01. Elevator, Dumbwaiter, Escalator, Or Moving-Walk Electrical. Any person qualifying for and having in his possession a current elevator electrical license may install, maintain, repair, and replace equipment, controls, and wiring beyond the disconnect switch in the machine room of the elevator and pertaining directly to the operation and control thereof when located in the elevator shaft and machine room. He shall be employed by a licensed elevator electrical contractor and his installation shall be limited to this category. The holder of such specialty license may not countersign a contractor's license application as supervising journeyman except for work within his specialty. Effective Date: (4-9-79)

02. Sign Electrical. Any person qualifying for and having in his possession a current sign electrical license may install, maintain, repair, and replace equipment, controls, and wiring on the secondary side of sign disconnecting means; providing the disconnecting means is located on the sign or within sight therefrom. He shall be employed by a licensed sign electrical contractor whose installations shall be limited to this category. The holder of such specialty license may not countersign a contractor's license application as supervising journeyman except for work within his specialty. Effective Date: (3-15-02)

03. Manufacturing Or Assembling Equipment. Effective Date: (4-5-00)

a. A licensed specialty manufacturing or assembling equipment electrician must be employed by a licensed specialty manufacturing or assembling equipment contractor in order to work in this category. The holder of a specialty license in this category may not countersign a contractor's license application as supervising journeyman except for work within this specialty. Effective Date: (4-5-00)

b. Any person licensed pursuant to Subsection 014.03.a. may install, maintain, repair, and replace equipment, controls, and accessory wiring, integral to the specific equipment, on the load side of the equipment disconnecting means. Electrical service and feeder are to be installed by others. The licensee may also install circuitry in modules or fabricated enclosures for the purpose of connecting the necessary components which individually bear a label from a nationally recognized testing laboratory when such equipment is designed and manufactured for a specific job installation. All wiring completed shall meet all requirements of Title 54, Chapter 10, Idaho Code, all rules promulgated pursuant thereto, and the most current edition of the National Electrical Code. Effective Date: (7-1-94)

04. Limited Energy Electrical License. Effective Date: (9-17-85)

a. Limited energy systems are defined as fire and security alarm systems, class 2 and class 3 signaling circuits, key card operators, nurse call systems, motor and electrical apparatus controls and other limited energy applications covered by the NEC. Effective Date: (7-1-99)

b. Limited energy systems do not include, and no license of any type is required for, the installation of landscape sprinkler controls or communication circuits, wires and apparatus that include telephone systems, telegraph facilities, outside wiring for fire and security alarm systems which are used for communication purposes, and central station systems of a similar nature, PBX systems, audio-visual and sound systems, public address and intercom systems, data communication systems, radio and television systems, antenna systems and other similar systems. Effective Date: (7-1-99)

c. Unless exempted by Section 54-1016, Idaho Code, any person who installs, maintains, replaces or repairs electrical wiring and equipment for limited energy systems in facilities other than one (1) or two (2) family dwellings shall be

required to have a valid limited energy electrical license and must be employed by a licensed limited energy specialty electrical contractor or electrical contractor. The holder of a specialty license may only countersign a contractor's application as a supervising journeyman for work within his specialty. Effective Date: (7-1-98)

05. Irrigation Sprinkler Electrical. Any person qualifying for and having in his possession, an irrigation system electrical license may install, maintain, repair and replace equipment, controls and wiring beyond the disconnect switch supplying power to the electric irrigation machine. The irrigation machine is considered to include the hardware, motors and controls of the irrigation machine and underground conductors connecting the control centers on the irrigation machine to the load side of the disconnecting device. Disconnect device to be installed by others. All such installations performed by individuals under this section shall be done in accordance with the applicable provisions of the National Electrical Code. He shall be employed by a licensed electrical contractor whose license is contingent upon the granting of a specialty electrical license to an employee and whose installations shall be limited to this category. The holder of a specialty license may not countersign a contractor's license application as supervising specialty journeyman except for work in his specialty. Effective Date: (1-1-92)

06. Well Driller And Water Pump Installer Electrical Licenses. All such installations performed by individuals under this section shall be done in accordance with the applicable provisions of the approved National Electrical Code. He shall be employed by a licensed well driller and water pump installer electrical contractor whose installations shall be limited to this category. The holder of such specialty license may not countersign a contractor's license application as supervising specialty journeyman except for work in his specialty. Any person currently licensed in this category may perform the following types of installations: Effective Date: (1-14-87)

a. Single or three (3) phase well pumps: install, maintain, repair and replace all electrical equipment, wires, and accessories from the pump motor up to the load side, including fuses, of the disconnecting device. Disconnecting device installed by others. Effective Date: (7-1-98)

b. Domestic water pumps, one hundred twenty/two hundred forty (120/240) volt, single phase, sixty (60) amps or less: Install, maintain, repair and replace all electrical equipment, wires, and accessories from the pump motor up to and including the disconnecting device. Effective Date: (7-1-98)

c. Temporarily connect into a power source to test the installations, provided that all test wiring is removed before the installer leaves the site. Effective Date: (1-14-87)

07. Refrigeration, Heating, And Air-Conditioning Electrical Installer. All such installation, maintenance, and repair performed by individuals under this section shall be done in accordance with applicable provisions of the National Electrical Code. He shall be employed by a licensed electrical contractor whose license shall be covered by this category. The holder of such specialty license may not countersign a contractor's license application as a supervising specialty journeyman except for work in his specialty. Any person currently licensed in this category may perform the following types of installations, which installations shall be limited to factory- assembled, packaged units: Effective Date: (9-17-85)

a. Heating Units (single phase): install, repair, and maintain all electrical equipment, wires, and accessories from the unit up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. Effective Date: (9-17-85)

b. Refrigeration, Air-Conditioning Equipment and Heat Pumps (single phase): install, repair, and maintain all electrical equipment, wires, and accessories from the unit up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. Effective Date: (9-17-85)

c. Refrigeration, Air-Conditioning and Heating Systems (three-phase): install, maintain, and repair all electrical equipment and accessories up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. Effective Date: (9-17-85)

Idaho Code
GENERAL LAWS
TITLE 54. PROFESSIONS, VOCATIONS, AND BUSINESSES
CHAPTER 10. ELECTRICAL CONTRACTORS AND JOURNEYMEN

Idaho Code § 54-1001 Declaration of policy

From and after the taking effect of this act, all installations in the state of Idaho of wires and equipment to convey electric current and installations of apparatus to be operated by such current, except as hereinafter provided, shall be made substantially in accord with the National Electrical Code of 1971, as approved by the American Standards Institute, relating to such work as far as the same cover both fire and personal injury hazards, and as the National Electrical Code shall be amended, revised, compiled and published from time to time and as such amendments or revisions are adopted by the Idaho electrical board.

Idaho Code
GENERAL LAWS
TITLE 54. PROFESSIONS, VOCATIONS, AND BUSINESSES
CHAPTER 10. ELECTRICAL CONTRACTORS AND JOURNEYMEN

Idaho Code § 54-1016. Exemptions

Nothing in this act shall be deemed to apply to the installation or maintenance of communication circuits, wires and apparatus; nor to any electrical public utility, or its employees, in the installation and maintenance of electrical wiring, circuits, apparatus and equipment by or for such public utility, or comprising a part of its plants, lines or system. The licensing provisions of this act shall not apply to persons making electrical installations on their own property or to regularly employed maintenance electricians working on the premises of their employer.

15.08.010 Applicability Of Codes:

All installations in the city of wires and equipment to convey electric current and installations of apparatus to be operated by such current, except as provided in this chapter, shall be in conformity with the national electrical code as adopted in chapter 15.02 of this title. (Ord. 2757, 2005)

City Limits Only

CITY OF TWIN FALLS

ELECTRICAL PERMIT FEE SCHEDULE

TEMPORARY CONSTRUCTION SERVICES:

(To be installed for use during construction only, for a period not to exceed one year)
A. 200 amps or less, per location - $40
B. All others shall be calculated using the contract price table below in "Other Installations. . ."

RESIDENTIAL:

NEW SINGLE FAMILY DWELLING - (Includes everything contained within the residential structure and attached garage wired at the same time)
A. Up to 200 amp service - $120 (includes up to 3 inspections)
B. 201 to 400 amp service - $210 (includes up to 3 inspections)
C. Over 400 amp service - calculate using the contract price table below in "Other Installations. . ."

DETACHED RESIDENTIAL STRUCTURES - Calculate using the contract price table below in "Other Installations. . ."

NEW MULTI-FAMILY DWELLINGS -
A. Duplex - $210
B. Multifamily (3 or more multifamily units) - $120 per building plus $60 per unit

EXISTING RESIDENTIAL - $40 plus $10 for each additional branch circuit. (Remodels, Additions)

RESIDENTIAL SPAS, HOT TUBS, HYDRO MASSAGE TUBS, SWIMMING POOLS –
A. One- & two-family dwellings - $40 base fee plus $40 grounding grid where applicable.
B. Multifamily, industrial & commercial - Calculate using the contract price table below in "Other Installations. . ."

RESIDENTIAL ELECTRIC SPACE HEATING AND/OR AIR CONDITIONING (When not part of a new residential construction permit and no additional wiring) - $40

DOMESTIC WATER PUMPS - See Pumps under "Other Installations. . ." below.

MODULAR/MANUFACTURED HOMES: $50 base fee plus $10 for each additional circuit. (Distribution wiring including pedestal, service conductors and lot supply to individual units in mobile home and RV parks shall be calculated using the contract price table below in "Other Installations. . .")

OTHER INSTALLATIONS INCLUDING INDUSTRIAL AND COMMERCIAL:

CONTRACT PRICE TABLE

Wiring cost ≤ $2,000:	$40 + 2 1/2% (.025) of total wiring cost
Wiring cost $2,001 thru $10,000	$100 + 1% (.01) of total wiring cost
Wiring cost ≥ $10,001	$180 + .5% (.005) of the portion of wiring costs ≥$10,001

All fees calculated using the contract price table, must be calculated on the total wiring cost of the job. All permit fees shall be calculated using the contract price table, except those specifically listed elsewhere in this schedule. The wiring cost shall be the cost to the owner of all labor charges and all wiring materials and equipment installed as part of the wiring system. When labor is performed by a homeowner, such labor cost shall be based upon the market value of said labor, and used- or reused materials shall be based at fifty percent (50%) of the column 3 pricing as published by Trade Service Publication or National Price Service Pricing or the actual cost, whichever is greater. For all owner-supplied, factory assembled equipment to be installed, the permit fee will be one-half of one percent (.005) of the total cost of the equipment OR on an hourly rate of $80 for the first hour of each inspection and $40 for each subsequent hour.

PUMPS (WATER, DOMESTIC WATER, IRRIGATION, SEWAGE)
Up to 25 HP - $40
26 to 200 HP - $60
Over 200 HP - $80
Phase inverters and roto phase equipment - use the contract price table, in addition to the pump motor fee.

ELECTRICALLY-DRIVEN IRRIGATION MACHINES
Center Pivot: fifty dollars - $50 +$10 per tower or drive motor.
Other types - $50 + $10 per motor.
(Note: No additional fee required for underground feeder).

ELECTRIC SIGNS AND OUTLINE LIGHTING
Electric signs - $40 per sign
Outline Lighting - $40 per occupancy

TEMPORARY AMUSEMENT/INDUSTRY INSTALLATIONS - Each time a ride, concession or generator is set up - $40 base fee + $10 for each ride, concession or generator.

Permit fees are due upon commencement of the work and must be paid prior to inspection. Failure to obtain permits and pay required fees may result in the assessment of an investigation fee, equal to the permit fee amount. An investigation fee is assessed in addition to the permit fee.

OTHER FEES:

A. Requested inspections of existing installations - $42/hour (1/2 hour minimum, to include travel time)
B. Re-inspection or additional inspection - $50
C. Plan check fee/technical service fee - $42/hour (1/2 hour minimum)

CITY OF TWIN FALLS BUILDING DEPARTMENT

345 2nd Ave. E., Twin Falls, ID 83301
Phone (208) 735-7238 Fax (208) 736-2256

ELECTRICAL PERMIT APPLICATION

_____Residential _____Commercial

Project Address _____

Lot _____ Block _____ Subdivision _____

Tenant /Owner _____

Permit Applicant/Contractor _____

Applicant /Contractor Mailing Address _____

Contractor License Number	Expiration Date	Phone Number	Fax Number	Cell Number

Itemize fees in accordance with the current fee schedule

Temp Construction Services ____# of amps	$_____
New Single Family _____# of amps	$_____
New Multi Family	$_____
_____Duplex _____ 3 or More (# of units)	
Modular/manuf. Home ____# of circuits	$_____
Existing Residential ____# of circuits	$_____
Spas, hot tubs, pools, etc. (1 & 2 family)	$_____
Res. electric space heating &/or air conditioning	$_____
(when not part of new resid. constr. & no additional wiring)	
Detached res. structures (use contract price)	$_____
Water pump ____# of HP	$_____
Irrigation Machine ____# of towers or drive motors	$_____
Rides/Concessions #____	$_____
Signs/Outlines #____	$_____
All other commercial/industrial/multi-family Job Cost $ _____	$_____
TOTAL	$_____

Job Description _____

Contract Price Table

Wiring cost ≤ $2,000	$40 + 2 1/2% (.025) of total wiring cost
Wiring cost $2,001 thru $10,000	$100 + 1% (.01) of total wiring cost
Wiring cost ≥ $10,001	$180 + .5% (.005) of the portion of wiring costs ≥ $10,001

FOR ELECTRICAL INSPECTIONS CALL 735-7235