

CITY OF LAS VEGAS CIVIL SERVICE BOARD OF TRUSTEES
Department of Human Resources
400 Stewart Avenue
Las Vegas, Nevada
CITY OF LAS VEGAS INTERNET ADDRESS: <http://www.lasvegasnevada.gov>

start: 11:35
Present: EM
EB
MW
PR
JA
S.V.

TELECONFERENCE AGENDA

DATE: July 25, 2007

TIME: 11:30 a.m.

ALL ITEMS ON THIS AGENDA ARE SCHEDULED FOR ACTION UNLESS SPECIFICALLY NOTED OTHERWISE. UNLESS OTHERWISE STATED, ITEMS MAY BE TAKEN OUT OF THE ORDER PRESENTED AT THE DISCRETION OF THE CHAIRPERSON.

*NOTE: Minutes from this meeting will be included as part of the next regularly scheduled meeting on August 8, 2007.

- I. CALL TO ORDER
- II. ANNOUNCEMENT RE: COMPLIANCE WITH THE OPEN MEETING LAW
- III. BUSINESS
 - A. ELIGIBLE LISTS TO BE CERTIFIED *M-EB
2-MW*
 - 1) Information Technologies Project Coordinator - Open
 - 2) Planner II (Comprehensive/Current) - Promotional
 - B. CLASSIFICATION SPECIFICATIONS FOR APPROVAL *M-PR
2-EB*
 - 1) Industrial Electrician II - Revised
 - 2) Senior Industrial Electrician - Revised
- IV. ITEMS FOR DISCUSSION ONLY NO BOARD ACTION REQUIRED
None
- V. CITIZEN PARTICIPATION

Adj 11:40

PUBLIC COMMENT DURING THIS PORTION OF THE AGENDA MUST BE LIMITED TO MATTERS WITHIN THE JURISDICTION OF THE CIVIL SERVICE BOARD. NO SUBJECT MAY BE ACTED UPON BY THE CIVIL SERVICE BOARD UNLESS THAT SUBJECT IS ON THE AGENDA AND IS SCHEDULED FOR ACTION. IF YOU WISH TO BE HEARD, GIVE YOUR NAME FOR THE RECORD. THE AMOUNT OF DISCUSSION ON ANY SINGLE SUBJECT, AS WELL AS THE AMOUNT OF TIME ANY SINGLE SPEAKER IS ALLOWED, MAY BE LIMITED.

Facilities are provided throughout City Hall for the convenience of disabled persons. Special equipment for the hearing impaired is available for use at meetings. If you need an accommodation to attend and participate in this meeting, please call the DEPARTMENT DESIGNEE at 229-6315 and advise of your need at least 48 hours in advance of the meeting. The City's TDD number is 386-9108.

THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED AT THE FOLLOWING LOCATIONS:

State of NV, Grant Sawyer Building, 555 E. Washington Avenue
Senior Citizen Center, 451 E. Bonanza Road
Clark County Government Center, 500 South Grand Central Parkway
Bulletin Board, City Hall Plaza (next door to Metro Records)
City Hall 2nd Floor, Human Resources Posting Bulletin Board

27 ✓



**ELIGIBILITY
LISTS FOR THIS
MEETING ARE
DEEMED
CONFIDENTIAL
PER NRS 603A**

CITY OF LAS VEGAS

AGENDA DOCUMENTATION

Date: July 25, 2007

TO: CIVIL SERVICE BOARD OF TRUSTEES FROM: F. CLAUDETTE ENUS, SECRETARY

SUBJECT: A. ELIGIBLE LISTS TO BE CERTIFIED

BOARD ACTION: Vote to Certify or Not Certify
(May be taken as a group)

TOTAL ELIGIBLE LISTS PRESENTED: 2

	<u>APPLIED</u>	<u>TESTED</u>	<u>PASSED & PLACED ON ELIGIBLE LISTS</u>
1. Information Technologies Project Coordinator – Open	10	6	3
2. Planner II (Comprehensive/Current) – Promotional	1	1	1

CITY OF LAS VEGAS

ELIGIBLE LIST

Information Technologies Project Coordinator
Examination

July 11, 2007
Date

0779459060
Exam Code

Open
Open/Promotional

NAME
GROUP 1
None
GROUP 2
See Attached

REPORT OF EXAMINATION

	<u>APPLICATIONS</u>		<u>ELIGIBLE LIST</u>
ACCEPTED	6	GROUP 1	0
REJECTED	10	GROUP 2	3
TOTAL RECEIVED	16	TOTAL ON LIST	3

TESTS

	<u>WRITTEN</u>	<u>ORAL</u>	<u>PERFORMANCE</u>	<u>T & E</u>
(Weight)				100%
PASSED				3
FAILED				3
TOTAL TESTED				6
DID NOT APPEAR				0

CITY OF LAS VEGAS

ELIGIBLE LIST

Planner II (Comprehensive/Current)
Examination

July 11, 2007
Date

06276411P
Exam Code

Promotional
Open/Promotional

NAME
GROUP 1
See Attached
GROUP 2
None

REPORT OF EXAMINATION

	<u>APPLICATIONS</u>		<u>ELIGIBLE LIST</u>
ACCEPTED	1	GROUP 1	1
REJECTED	0	GROUP 2	0
TOTAL RECEIVED	1	TOTAL ON LIST	1

TESTS

	<u>WRITTEN</u>	<u>ORAL</u>	<u>PERFORMANCE</u>	<u>T & E</u>
(Weight)				100%
PASSED				1
FAILED				0
TOTAL TESTED				1
DID NOT APPEAR				0

INDUSTRIAL ELECTRICIAN II

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

To perform skilled maintenance, repair and installation of industrial electrical systems at the Water Pollution Control Facility and other City facilities; to provide solutions for equipment problems; and to perform a variety of technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the full journey level class in the Industrial Electrician series. Positions at this level are distinguished from the Sr. Industrial Electrician by the level of experience required to perform the full range of duties as assigned. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit.

SUPERVISION RECEIVED

Receives general supervision from a Facilities Field Supervisor or Facilities Maintenance Supervisor and higher-level staff.

May receive technical and functional supervision from a Sr. Industrial Electrician.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS—*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Install, repair and maintain electrical and control systems for motors, pumps, fans, blowers, pump lift stations, conveyors, bar screens, uninterruptible power supply (UPS) and emergency generators and transfer switches at the Water Pollution Control Facility (WPCF) and other city facilities.
2. Install, repair, replace and maintain all wiring for the WPCF buildings, wastewater treatment plant, programmable logic controllers (PLC), computers and peripherals. Maintain plant lighting including lamps, poles, conduit, wiring, fuses, mast arms and fixtures.
3. Operate circuit testing equipment, pneumatic tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, small power tools, hand tools and related equipment.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Essential Functions:

4. Maintain systems and equipment such as variable frequency drives, silicon controlled rectifier drives, low and medium voltage 3-phase switchgear and motor starters, chemical batching, mixing and delivery systems. Clean, adjust, tighten, lubricate and inspect motor control center cubicles and switchgear and perform annual inspections on PLCs and relay control panels for cleanliness and tightness. Outside the WPCF, maintain motors and pumps servicing swimming pools, park irrigation systems and roadway underpasses.
5. Participate in the design and fabrication of various specialized electrical control panels for pumps and related systems within the chemical delivery systems.
6. Assist in trouble shooting electrical systems including controls, motors, generators and pumps and perform scheduled maintenance.
7. Pull motors and pumps for overhaul and reinstallation, including tear down, repair and re-assembly.
8. Read and interpret blueprints, schematic drawings and related symbols and markings.
9. Adhere to all related codes and regulations for duties assigned including obtaining required permits; adhere to established safety-related work practices and procedures.
10. Perform routine maintenance of systems.

Marginal Functions:

1. Perform related duties and responsibilities as required.
2. Estimate time, materials and equipment required for jobs assigned and requisition materials as required. Verify manifests upon receipt and inspection of new materials delivered by vendors; move materials into storage.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of industrial electrical systems.
National Electrical Code.
Properties and principles of electricity.
Preventive maintenance techniques and procedures.
Basic principles and practices of electrical construction.
Principles of mathematics.
Occupational hazards and standard safety practices.
Electrical calculation and basic design techniques.
Methods, techniques, operations, services and activities of heavy industrial, low to medium voltage systems.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Knowledge of:

Operational characteristics of materials, equipment and tools used in electrical repair, maintenance and installation of heavy industrial, low to medium voltage systems.

Basic troubleshooting and diagnostic techniques in heavy industrial, low to medium voltage systems.

Blueprints, schematics, symbols, drawings and related materials.

Safe work practices in a heavy industrial setting.

Current computer hardware and common applications at a basic level, such as word processing, spreadsheet and database.

Ability to:

Independently perform electrical installation and repair work.

Read and interpret department policies and procedures.

Operate a variety of electrical repair equipment in a safe and effective manner.

Drive and operate boom truck and aerial lift equipment with a lift capacity of 80 feet.

Work at heights up to 50 feet.

Work in aerial lift when fully extended.

Work in confined spaces.

Perform maintenance and repairs on the wastewater treatment plant systems.

Design and fabricate specialized controls for chemical delivery systems.

Work near connected electrical circuits.

Distinguish colors.

Use a computer to prepare work orders and time cards.

Work independently in the absence of supervision.

Understand and follow oral and written instructions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Maintain physical condition appropriate to the performance of assigned duties and responsibilities which may include the following:

- *Walking, standing or sitting for extended periods of time; and*
- *Operating assigned equipment and vehicles.*

Maintain effective audio-visual discrimination and perception needed for:

- *Making observations;*
- *Communicating with others;*
- *Reading and writing; and*
- *Operating assigned equipment and vehicles.*

Maintain mental capacity which allows the capability of:

- *Making sound decisions;*
- *Effective interaction and communication with others; and*
- *Demonstrating intellectual capabilities.*

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Experience and Training Requirements

Experience:

Two years of increasingly responsible journey-level electrical experience, preferably in an industrial environment.

Training:

Equivalent to graduation from high school, supplemented by specialized training in the electrical field.

License or Certificate

Possession of an appropriate, valid driver's license on the date of application.

By the date of application, must possess or have completed any one of the following four:

1. A journeyman electrician card from a recognized union, such as the International Brotherhood of Electrical Workers (IBEW).
2. An apprenticeship from an organization such as a chapter of the Associated Builders and Contractors (ABC), or a union such as the IBEW.
3. Official mailed test results from the International Code Council indicating a passing score on the Standard Journeyman Electrician or Standard Master Electrician examination. Examination must have been taken within three years of the date of application. The Standard Journeyman Sign Electrician and the Standard Journeyman Residential Electrician examinations are not acceptable.
4. A current Clark County, Nevada, Journeyman Electrician or Master Electrician ID card.

Possession, and maintenance, of a current Clark County Journeyman Electrician or Master Electrician ID card within 6 months of the date of appointment.

Possession of an Explosive Tool Use certificate within 6 months of appointment.

Possession of a Fork Lift Certificate from the City of Las Vegas within 6 months of appointment.

Possession of an appropriate aerial lift certification from the City of Las Vegas within 6 months of date of appointment.

WORKING CONDITIONS

Constantly = more than 2/3 of the time; Frequently = 1/3 to 2/3 of the time; Occasionally = less than 1/3 of the time; Infrequently = less than 5% of the time.

Environmental Conditions:

Location: Work may be indoors or outdoors depending on assignment, including travel from site to site.

Hazards: Exposure to electric shock with high voltage, burns, toxic and caustic chemicals, biological hazards, odors, fumes, dust, sparks, extremes of heat and cold, wet, oily or slippery surfaces, sharp edges, pinch points, moving equipment, machinery and vehicles, vibration, noise, work at heights on ladders and lifts and in confined spaces.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Environmental Conditions:

Equipment Used: Manlifts, hand and power tools, electrical testing equipment, pneumatic tools, jackhammers, cutting torch, explosive tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, forklift, truck, computer, boom truck and aerial lift equipment.

Safety Equipment: Safety shoes, hearing and eye protection, hardhat, gloves, apron, rubber boots, safety lanyard.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for:

Standing/walking: Frequently-constantly on all types of surfaces throughout shift, up to 1-2 miles per day depending on assignment.

Sitting: Occasionally, while working on equipment, at workbench, completing paperwork, driving vehicle.

Lift/carry: Occasionally, 1-50 lbs., hand and power tools, equipment, panels for distances up to 100 ft. May wear 10-15 lb. tool belt. Infrequent lifting up to 100 lbs., motors, controls, materials. Assistance available for lifting over 50 lbs.

Push/pull: Frequently, using both hands and arms in performing manual labor (pick and shovel), removing panels on equipment, moving equipment and supplies, tightening connections, exerting up to 30-75 lbs. force to pull wire, bend conduit.

Climbing: Frequently, stairs, ladders, lifts, depending on location. May involve extensive work on ladders, up to 50%, at 8-50 ft. heights. Balancing required.

Bending/twisting: Frequently, throughout shift at waist, knees and neck depending on task assigned. Repairs may require work in awkward positions, extended reaching and leaning.

Kneeling/crouching/crawling: Occasionally, up to 10%, while working in attics, tight spaces, in underground pipes, tunnels.

Hands/arms: Constant use of both hands and arms in reaching, handling, grasping, fingering while performing various duties. Work can be highly repetitive and may require excessive gripping and fingering in pulling wire, handling large and small parts. Frequent overhead reaching required while working with tools.

Sight: Constantly, required to perform repairs in a safe, efficient manner. Visual requirements include color vision, depth perception, peripheral vision, hand/eye/foot coordination, visual acuity in near-, mid- and far-ranges.

Speech/hearing: Constantly, in communicating and performing work in a safe, efficient manner.

Other physical demands: Must possess sense of smell and tactile feeling. Ability to work in confined spaces and awkward positions.

ARB
REV 7/16/07
FLSA & City: nonexempt

CSB 7/25/07

SENIOR INDUSTRIAL ELECTRICIAN

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

To perform skilled maintenance, repair and installation of industrial electrical systems at the Water Pollution Control Facility and other city facilities; to provide solutions for equipment problems; to plan, coordinate, lead and participate in the work assigned; and to perform a variety of technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level class in the Industrial Electrician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series including problem solving and creating, defining and applying preventive maintenance programs. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from a Facilities Field Supervisor or Facilities Maintenance Supervisor and higher-level staff.

May exercise functional and technical supervision over lower level staff.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS—*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions

1. Plan, direct, coordinate, lead and participate in the installation, repair and maintenance of electrical and control systems for motors, pumps, fans, blowers, pump lift stations, conveyors, bar screens, uninterruptible power supply and emergency generators and transfer switches at the Water Pollution Control Facility (WPCF) and other city facilities.
2. Install, repair, replace and maintain all wiring for the WPCF buildings, wastewater treatment plant, programmable logic controllers (PLCs), computers and peripherals. Maintain plant lighting including lamps, poles, conduit, wiring, fuses, mast arms and fixtures.
3. Operate circuit testing equipment, pneumatic tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, small power tools, hand tools and related equipment.

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Essential Functions:

4. Maintain systems and equipment such as variable frequency drives, silicon controlled rectifier drives, low and medium voltage 3-phase switchgear and motor starters, chemical batching, mixing and delivery systems. Clean, adjust, tighten, lubricate and inspect motor control center cubicles and switchgear and perform annual inspections on PLC and relay control panels for cleanliness and tightness. Outside the WPCF, maintain motors and pumps servicing swimming pools, park irrigation systems and roadway underpasses.
5. Design and fabricate various specialized electrical control panels for pumps and related systems within the chemical delivery systems.
6. Perform advanced trouble shooting of electrical systems including controls, motors, generators and pumps and perform scheduled maintenance.
7. Pull motors and pumps for overhaul and reinstallation, including tear down, repair and reassembly.
8. Read and interpret blueprints, schematic drawings and related symbols and markings.
9. Train assigned employees in work methods, techniques and the set up and use of equipment.
10. Adhere to all related codes and regulations for duties assigned including obtaining required permits; ensure assigned employees adhere to established safety-related work practices and procedures.
11. Estimate time, materials and equipment required for jobs assigned and requisition materials as required.

Marginal Functions:

1. Perform related duties and responsibilities as required.
2. Perform routine maintenance of systems.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of industrial electrical systems.
National Electrical Code.
Properties and principles of electricity.
Preventive maintenance techniques and procedures.
Principles and practices of electrical construction.
Principles of mathematics.
Occupational hazards and standard safety practices.
Electrical calculation and design techniques.

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Knowledge of:

Methods, techniques, operations, services and activities of heavy industrial, low to medium voltage systems.
Operational characteristics of materials, equipment and tools used in electrical repair, maintenance and installation of heavy industrial, low to medium voltage systems.
Troubleshooting and diagnostic techniques in heavy industrial, low to medium voltage systems.
Blueprints, schematics, symbols, drawings and related materials.
Safe work practices in a heavy industrial setting.
Current computer hardware and common applications at a basic level, such as word processing, spreadsheet and database.

Ability to:

Lead, organize, coordinate and review the work of staff in the area of work assigned.
Independently perform the most difficult electrical installation and repair work.
Interpret, explain and enforce department policies and procedures.
Operate a variety of electrical repair equipment in a safe and effective manner.
Drive and operate boom truck and aerial lift equipment with a lift capacity of 80 feet.
Work at heights up to 50 feet.
Work in aerial lift when fully extended.
Work in confined spaces.
Perform maintenance and repairs on the wastewater treatment plant systems.
Design and fabricate specialized controls for chemical delivery systems.
Work near connected electrical circuits.
Distinguish colors.
Use a computer to prepare work orders and time cards.
Work independently in the absence of supervision.
Understand and follow oral and written instructions.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities, which may include the following:
-- *Walking, standing or sitting for extended periods of time; and*
-- *Operating assigned equipment and vehicles.*
Maintain effective audio-visual discrimination and perception needed for:
-- *Making observations;*
-- *Communicating with others;*
-- *Reading and writing; and*
-- *Operating assigned equipment.*
Maintain mental capacity which allows the capability of:
-- *Making sound decisions;*
-- *Effective interaction and communication with others; and*
-- *Demonstrating intellectual capabilities.*

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Experience and Training Requirements

Experience:

Three years of increasingly responsible journey-level electrical experience, preferably in an industrial environment.

Training:

Equivalent to graduation from high school, supplemented by specialized training in the electrical field.

License or Certificate

Possession of an appropriate, valid driver's license on the date of application.

Possession, and maintenance, of a current Clark County Journeyman Electrician or Master Electrician ID card on the date of application.

Possession of an Explosive Tool Use certificate within 6 months of appointment.

Possession of a Fork Lift Certificate from the City of Las Vegas within 6 months of appointment.

Possession of an appropriate aerial lift certification from the City of Las Vegas within 6 months of date of appointment.

WORKING CONDITIONS

Constantly = more than 2/3 of the time; Frequently = 1/3 to 2/3 of the time; Occasionally = less than 1/3 of the time; Infrequently = less than 5% of the time.

Environmental Conditions:

Location: Work may be indoors or outdoors depending on assignment, including travel from site to site.

Hazards: Exposure to electric shock with high voltage, burns, toxic and caustic chemicals, biological hazards, odors, fumes, dust, sparks, extremes of heat and cold, wet, oily and slippery surfaces, sharp edges, pinch points, moving equipment, machinery and vehicles, vibration, noise, work at heights on ladders and lifts and in confined spaces.

Equipment Used: Manlifts, hand and power tools, electrical testing equipment, pneumatic tools, jackhammers, cutting torch, explosive tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, forklift, truck, computer, boom truck and aerial lift equipment.

Safety Equipment: Safety shoes, hearing and eye protection, hard hat, gloves, apron, rubber boots, safety lanyard.

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Physical Conditions:

Essential and marginal functions require maintaining physical condition necessary for:

- Standing/walking:* Frequently-constantly on all types of surfaces throughout shift, up to 1-2 miles per day depending on assignment.
- Sitting:* Occasionally, while working on equipment, at workbench, completing paperwork, driving vehicle.
- Lift/carry:* Occasionally, 1-50 lbs., hand and power tools, equipment, panels, distances up to 100 ft. May wear 10-15 lb. tool belt. Infrequent lifting up to 100 lbs., motors, controls, materials. Assistance available for lifting over 50 lbs.
- Push/pull:* Frequently, using both hands and arms in performing manual labor (pick and shovel), removing panels on equipment, moving equipment and supplies, tightening connections, exerting up to 30-75 lbs. force to pull wire and bend conduit.
- Climbing:* Frequently, stairs, ladders, lifts, depending on location. May involve extensive work on ladders, up to 50%, at 8-50 ft. heights. Balancing required.
- Bending/twisting:* Frequently, throughout shift at waist, knees and neck depending on task assigned. Repairs may require work in awkward positions, extended reaching or leaning.
- Kneeling/crouching/crawling:* Occasionally, up to 10%, while working in attics, tight spaces, in underground pipes, tunnels.
- Hands/arms:* Constant use of both hands and arms in reaching, handling, grasping, fingering while performing various duties. Work can be highly repetitive and may require excessive gripping and fingering in pulling wire, handling large and small parts. Frequent overhead reaching required while working with tools.
- Sight:* Constantly, required to perform repairs in a safe, efficient manner. Visual requirements include color vision, depth perception, peripheral vision, hand, eye and foot coordination, and visual acuity in near-, mid- and far-ranges.
- Speech/hearing:* Constantly, in communicating and performing work in a safe, efficient manner.
- Other physical demands:* Must possess sense of smell and tactile feeling. Ability to work in confined spaces and awkward positions.

ARB
REV 7/16/07
FLSA & City: nonexempt

CSB 7/25/07

INDUSTRIAL ELECTRICIAN II

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

To perform skilled maintenance, repair and installation of industrial electrical systems at the Water Pollution Control Facility and other City facilities; to provide solutions for equipment problems; and to perform a variety of technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the full journey level class in the Industrial Electrician series. Positions at this level are distinguished from the Sr. Industrial Electrician by the level of experience required to perform the full range of duties as assigned. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit.

SUPERVISION RECEIVED

Receives general supervision from a Facilities Field Supervisor or Facilities Maintenance Supervisor and higher-level staff.

May receive technical and functional supervision from a Sr. Industrial Electrician.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS--*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Install, repair and maintain electrical and control systems for motors, pumps, fans, blowers, pump lift stations, conveyors, bar screens, uninterruptible power supply (UPS) and emergency generators and transfer switches at the Water Pollution Control Facility (WPCF) and other city facilities.
2. Install, repair, replace and maintain all wiring for the WPCF buildings, wastewater treatment plant, programmable logic controllers (PLC), computers and peripherals. Maintain plant lighting including lamps, poles, conduit, wiring, fuses, mast arms and fixtures.
3. Operate circuit testing equipment, pneumatic tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, small power tools, hand tools and related equipment.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Essential Functions:

4. Maintain systems and equipment such as variable frequency drives, silicon controlled rectifier drives, low and medium voltage 3-phase switchgear and motor starters, ~~chlorine gas and sulfur dioxide storage and delivery systems~~, chemical batching, mixing and delivery systems. Clean, adjust, tighten, lubricate and inspect motor control center cubicles and switchgear and perform annual inspections on PLCs and relay control panels for cleanliness and tightness. Outside the WPCF, maintain motors and pumps servicing swimming pools, park irrigation systems and roadway underpasses.
5. Participate in the design and fabrication of various specialized electrical control panels for pumps and related systems within the chemical delivery systems.
6. Assist in trouble shooting electrical systems including controls, motors, generators and pumps and perform scheduled maintenance.
7. Pull motors and pumps for overhaul and reinstallation, including tear down, repair and re-assembly.
8. Read and interpret blueprints, schematic drawings and related symbols and markings.
9. Adhere to all related codes and regulations for duties assigned including obtaining required permits; adhere to established safety-related work practices and procedures.
10. Perform routine maintenance of systems.

Marginal Functions:

1. Perform related duties and responsibilities as required.
2. Estimate time, materials and equipment required for jobs assigned and requisition materials as required. Verify manifests upon receipt and inspection of new materials delivered by vendors; move materials into storage.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of industrial electrical systems.
National Electrical Code.
Properties and principles of electricity.
Preventive maintenance techniques and procedures.
Basic principles and practices of electrical construction.
Principles of mathematics.
Occupational hazards and standard safety practices.
Electrical calculation and basic design techniques.
Methods, techniques, operations, services and activities of heavy industrial, high-low to medium voltage systems.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Knowledge of:

Operational characteristics of materials, equipment and tools used in electrical repair, maintenance and installation of heavy industrial, ~~high~~ low to medium voltage systems.

Basic troubleshooting and diagnostic techniques in heavy industrial, ~~high~~ low to medium voltage systems.

Blueprints, schematics, symbols, drawings and related materials.

Safe work practices in a heavy industrial setting.

Current computer hardware and common applications at a basic level, such as word processing, spreadsheet and database.

Ability to:

Independently perform electrical installation and repair work.

Read and interpret department policies and procedures.

Operate a variety of electrical repair equipment in a safe and effective manner.

Drive and operate boom truck and aerial lift equipment with a lift capacity of 80 feet.

Work at heights up to 40-50 feet.

Work in aerial lift when fully extended.

Work in confined spaces.

Perform maintenance and repairs on the wastewater treatment plant systems.

Design and fabricate specialized controls for chemical delivery systems.

Work near connected electrical circuits.

Distinguish colors.

Use a computer to prepare work orders and time cards.

Work independently in the absence of supervision.

Understand and follow oral and written instructions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Maintain physical condition appropriate to the performance of assigned duties and responsibilities which may include the following:

- *Walking, standing or sitting for extended periods of time; and*
- *Operating assigned equipment and vehicles.*

Maintain effective audio-visual discrimination and perception needed for:

- *Making observations;*
- *Communicating with others;*
- *Reading and writing; and*
- *Operating assigned equipment and vehicles.*

Maintain mental capacity which allows the capability of:

- *Making sound decisions;*
- *Effective interaction and communication with others; and*
- *Demonstrating intellectual capabilities.*

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Experience and Training Requirements

Experience:

Two years of increasingly responsible journey-level electrical experience, preferably in an industrial environment.

Training:

Equivalent to graduation from high school, supplemented by specialized training in the electrical field.

License or Certificate

Possession of an appropriate, valid driver's license on the date of application.

By the date of application, must possess or have completed any one of the following four:

1. A journeyman electrician card from a recognized union, such as the International Brotherhood of Electrical Workers (IBEW).
2. An apprenticeship from an organization such as a chapter of the Associated Builders and Contractors (ABC), or a union such as the IBEW.
3. Official mailed test results from the International Code Council indicating a passing score on the Standard Journeyman Electrician or Standard Master Electrician examination. Examination must have been taken within three years of the date of application. The Standard Journeyman Sign Electrician and the Standard Journeyman Residential Electrician examinations are not acceptable.
4. A current Clark County, Nevada, Journeyman Electrician or Master Electrician ID card.

Possession, and maintenance, of a current Clark County Journeyman Electrician or Master Electrician ID card within 6 months of the date of appointment.

Possession of an Explosive Tool Use certificate within 6 months of appointment.

Possession of a Fork Lift Certificate from the City of Las Vegas within 6 months of appointment.

Possession of an appropriate aerial lift certification from the City of Las Vegas within 6 months of date of appointment.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

WORKING CONDITIONS

Constantly = more than 2/3 of the time; Frequently = 1/3 to 2/3 of the time; Occasionally = less than 1/3 of the time; Infrequently = less than 5% of the time.

Environmental Conditions:

Location: Work may be indoors or outdoors depending on assignment, including travel from site to site.

Hazards: Exposure to electric shock with high voltage, burns, toxic and caustic chemicals, biological hazards, odors, fumes, dust, sparks, extremes of heat and cold, wet, oily or slippery surfaces, sharp edges, pinch points, moving equipment, machinery and vehicles, vibration, noise, work at heights on ladders and lifts and in confined spaces.

Equipment Used: Manlifts, hand and power tools, electrical testing equipment, pneumatic tools, jackhammers, cutting torch, explosive tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, forklift, truck, computer, boom truck and aerial lift equipment.

Safety Equipment: Safety shoes, hearing and eye protection, hardhat, gloves, apron, rubber boots, safety lanyard.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for:

Standing/walking: Frequently-constantly on all types of surfaces throughout shift, up to 1-2 miles per day depending on assignment.

Sitting: Occasionally, while working on equipment, at workbench, completing paperwork, driving vehicle.

Lift/carry: ~~Frequently~~ Occasionally, 1-50 lbs., hand and power tools, equipment, panels for distances up to 100 ft. May wear 10-15 lb. tool belt. Infrequent lifting up to 100 lbs., motors, controls, materials. Assistance available for lifting over 50 lbs.

Push/pull: Frequently, using both hands and arms in performing manual labor (pick and shovel), removing panels on equipment, moving equipment and supplies, tightening connections, exerting up to 30-75 lbs. force to pull wire, bend conduit.

Climbing: Frequently, stairs, ladders, lifts, depending on location. May involve extensive work on ladders, up to 50%, at 8-50 ft. heights. Balancing required.

Bending/twisting: Frequently, throughout shift at waist, knees and neck depending on task assigned. Repairs may require work in awkward positions, extended reaching and leaning.

Kneeling/crouching/crawling: Occasionally, up to 10%, while working in attics, tight spaces, in underground pipes, tunnels.

Hands/arms: Constant use of both hands and arms in reaching, handling, grasping, fingering while performing various duties. Work can be highly repetitive and may require excessive gripping and fingering in pulling wire, handling large and small parts. Frequent overhead reaching required while working with tools.

Sight: Constantly, required to perform repairs in a safe, efficient manner. Visual requirements include color vision, depth perception, peripheral vision, hand/eye/foot coordination, visual acuity in near-, mid- and far-ranges.

Speech/hearing: Constantly, in communicating and performing work in a safe, efficient manner.

CITY OF LAS VEGAS
Industrial Electrician II (Continued)

Other physical demands: Must possess sense of smell and tactile feeling. Ability to work in confined spaces and awkward positions.

ARB
REV 12/2/04/7/16/07
FLSA & City: nonexempt

CSB 1/12/05

SENIOR INDUSTRIAL ELECTRICIAN

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

To perform skilled maintenance, repair and installation of industrial electrical systems at the Water Pollution Control Facility and other city facilities; to provide solutions for equipment problems; to plan, coordinate, lead and participate in the work assigned; and to perform a variety of technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level class in the Industrial Electrician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series including problem solving and creating, defining and applying preventive maintenance programs. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from a Facilities Field Supervisor or Facilities Maintenance Supervisor and higher-level staff.

May exercise functional and technical supervision over lower level staff.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS—*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions

1. Plan, direct, coordinate, lead and participate in the installation, repair and maintenance of electrical and control systems for motors, pumps, fans, blowers, pump lift stations, conveyors, bar screens, uninterruptible power supply and emergency generators and transfer switches at the Water Pollution Control Facility (WPCF) and other city facilities.
2. Install, repair, replace and maintain all wiring for the WPCF buildings, wastewater treatment plant, programmable logic controllers (PLCs), computers and peripherals. Maintain plant lighting including lamps, poles, conduit, wiring, fuses, mast arms and fixtures.
3. Operate circuit testing equipment, pneumatic tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, small power tools, hand tools and related equipment.

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Essential Functions:

4. Maintain systems and equipment such as variable frequency drives, silicon controlled rectifier drives, low and medium voltage 3-phase switchgear and motor starters, ~~chlorine gas and sulfur dioxide storage and delivery systems~~, chemical batching, mixing and delivery systems. Clean, adjust, tighten, lubricate and inspect motor control center cubicles and switchgear and perform annual inspections on PLC and relay control panels for cleanliness and tightness. Outside the WPCF, maintain motors and pumps servicing swimming pools, park irrigation systems and roadway underpasses.
5. Design and fabricate various specialized electrical control panels for pumps and related systems within the chemical delivery systems.
6. Perform advanced trouble shooting of electrical systems including controls, motors, generators and pumps and perform scheduled maintenance.
7. Pull motors and pumps for overhaul and reinstallation, including tear down, repair and reassembly.
8. Read and interpret blueprints, schematic drawings and related symbols and markings.
9. Train assigned employees in work methods, techniques and the set up and use of equipment.
10. Adhere to all related codes and regulations for duties assigned including obtaining required permits; ensure assigned employees adhere to established safety-related work practices and procedures.
11. Estimate time, materials and equipment required for jobs assigned and requisition materials as required.

Marginal Functions:

1. Perform related duties and responsibilities as required.
2. Perform routine maintenance of systems.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of industrial electrical systems.
National Electrical Code.
Properties and principles of electricity.
Preventive maintenance techniques and procedures.
Principles and practices of electrical construction.
Principles of mathematics.
Occupational hazards and standard safety practices.
Electrical calculation and design techniques.

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Knowledge of:

Methods, techniques, operations, services and activities of heavy industrial, ~~high~~ low to medium voltage systems.

Operational characteristics of materials, equipment and tools used in electrical repair, maintenance and installation of heavy industrial, ~~high~~ low to medium voltage systems.

Troubleshooting and diagnostic techniques in heavy industrial, ~~high~~ low to medium voltage systems.

Blueprints, schematics, symbols, drawings and related materials.

Safe work practices in a heavy industrial setting.

Current computer hardware and common applications at a basic level, such as word processing, spreadsheet and database.

Ability to:

Lead, organize, coordinate and review the work of staff in the area of work assigned.

Independently perform the most difficult electrical installation and repair work.

Interpret, explain and enforce department policies and procedures.

Operate a variety of electrical repair equipment in a safe and effective manner.

Drive and operate boom truck and aerial lift equipment with a lift capacity of 80 feet.

Work at heights up to ~~40~~ 50 feet.

Work in aerial lift when fully extended.

Work in confined spaces.

Perform maintenance and repairs on the wastewater treatment plant systems.

Design and fabricate specialized controls for chemical delivery systems.

Work near connected electrical circuits.

Distinguish colors.

Use a computer to prepare work orders and time cards.

Work independently in the absence of supervision.

Understand and follow oral and written instructions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Maintain physical condition appropriate to the performance of assigned duties and responsibilities, which may include the following:

- *Walking, standing or sitting for extended periods of time; and*
- *Operating assigned equipment and vehicles.*

Maintain effective audio-visual discrimination and perception needed for:

- *Making observations;*
- *Communicating with others;*
- *Reading and writing; and*
- *Operating assigned equipment.*

Maintain mental capacity which allows the capability of:

- *Making sound decisions;*
- *Effective interaction and communication with others; and*
- *Demonstrating intellectual capabilities.*

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Experience and Training Requirements

Experience:

Three years of increasingly responsible journey-level electrical experience, preferably in an industrial environment.

Training:

Equivalent to graduation from high school, supplemented by specialized training in the electrical field.

License or Certificate

Possession of an appropriate, valid driver's license on the date of application.

Possession, and maintenance, of a current Clark County Journeyman Electrician or Master Electrician ID card on the date of application.

Possession of an Explosive Tool Use certificate within 6 months of appointment.

Possession of a Fork Lift Certificate from the City of Las Vegas within 6 months of appointment.

Possession of an appropriate aerial lift certification from the City of Las Vegas within 6 months of date of appointment.

WORKING CONDITIONS

Constantly = more than 2/3 of the time; Frequently = 1/3 to 2/3 of the time; Occasionally = less than 1/3 of the time; Infrequently = less than 5% of the time.

Environmental Conditions:

Location: Work may be indoors or outdoors depending on assignment, including travel from site to site.

Hazards: Exposure to electric shock with high voltage, burns, toxic and caustic chemicals, biological hazards, odors, fumes, dust, sparks, extremes of heat and cold, wet, oily and slippery surfaces, sharp edges, pinch points, moving equipment, machinery and vehicles, vibration, noise, work at heights on ladders and lifts and in confined spaces.

Equipment Used: Manlifts, hand and power tools, electrical testing equipment, pneumatic tools, jackhammers, cutting torch, explosive tools, trenchers, diggers, compressors, wire pulling devices, conduit bending equipment, forklift, truck, computer, boom truck and aerial lift equipment.

Safety Equipment: Safety shoes, hearing and eye protection, hard hat, gloves, apron, rubber boots, safety lanyard, ~~self-contained breathing apparatus (SCBA) equipment.~~

CITY OF LAS VEGAS
Senior Industrial Electrician (continued)

Physical Conditions:

Essential and marginal functions require maintaining physical condition necessary for:

Standing/walking: Frequently-constantly on all types of surfaces throughout shift, up to 1-2 miles per day depending on assignment.

Sitting: Occasionally, while working on equipment, at workbench, completing paperwork, driving vehicle.

Lift/carry: ~~Frequently~~Occasionally, 1-50 lbs., hand and power tools, equipment, panels, distances up to 100 ft. May wear 10-15 lb. tool belt. Infrequent lifting up to 100 lbs., motors, controls, materials. Assistance available for lifting over 50 lbs.

Push/pull: Frequently, using both hands and arms in performing manual labor (pick and shovel), removing panels on equipment, moving equipment and supplies, tightening connections, exerting up to 30-75 lbs. force to pull wire and bend conduit.

Climbing: Frequently, stairs, ladders, lifts, depending on location. May involve extensive work on ladders, up to 50%, at 8-50 ft. heights. Balancing required.

Bending/twisting: Frequently, throughout shift at waist, knees and neck depending on task assigned. Repairs may require work in awkward positions, extended reaching or leaning.

Kneeling/crouching/crawling: Occasionally, up to 10%, while working in attics, tight spaces, in underground pipes, tunnels.

Hands/arms: Constant use of both hands and arms in reaching, handling, grasping, fingering while performing various duties. Work can be highly repetitive and may require excessive gripping and fingering in pulling wire, handling large and small parts. Frequent overhead reaching required while working with tools.

Sight: Constantly, required to perform repairs in a safe, efficient manner. Visual requirements include color vision, depth perception, peripheral vision, hand, eye and foot coordination, and visual acuity in near-, mid- and far-ranges.

Speech/hearing: Constantly, in communicating and performing work in a safe, efficient manner.

Other physical demands: Must possess sense of smell and tactile feeling. Ability to work in confined spaces and awkward positions.

ARB

REV 12/2/04/16/07

FLSA & City: nonexempt

CSB: 1/12/05

CITY OF LAS VEGAS

AGENDA DOCUMENTATION

Date: July 25, 2007

TO: CIVIL SERVICE BOARD OF TRUSTEES FROM: F. CLAUDETTE ENUS, SECRETARY

SUBJECT: B. CLASSIFICATION SPECIFICATIONS FOR APPROVAL

BOARD ACTION: DISCUSSION AND POSSIBLE ACTION

CLASSIFICATION SPECIFICATIONS:

REVISED

1. Industrial Electrician II
2. Senior Industrial Electrician

Industrial Electrician II and Senior Industrial Electrician were revised to reflect current knowledge, abilities and working conditions.

RECOMMENDATION

The City recommends approval of these revised classification specifications.