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**To:** Human Resources Directors  
Facilities/Plant Directors

**From:** Cathy Robinson, Senior Director  
Human Resources Administration

**RESPONSE REQUIRED BY**  
**MARCH 3, 2000**

**Subject:** SKILLED TRADES CLASSIFICATIONS

Human Resources has completed a comprehensive review of State Employees' Trades Council (SETC), Unit 6, skilled trades classifications. Draft classification standards have been developed after extensive data collection and analysis, as well as review by subject experts. This memorandum addresses the proposed classification changes. Your review and feedback are critical to the development of the final classification standards. We have a collective bargaining requirement to complete this study and implement the new standards by June 2000. Because of this aggressive timeline, **your feedback is required by March 3, 2000.**

For your reference, the following attachments are provided:

- Attachment A – Proposed Classification Structure Overview Chart
- Attachment B – Descriptions of Proposed Classifications and Revisions
- Attachment C – Skilled Trades Classification Study Overview
- Attachment D – Draft Classification Standards

As you review these materials, please keep in mind the following notes and questions:

- In the updated classification structure, some classifications are grouped into a series where similar work is performed. This approach allowed us to condense and consolidate the standards and build on information in the preceding classification to avoid repetition and redundancy. Please note that classifications within a series remain separate classifications and that a classification within a series may not be necessarily a continuation from the previous classification.

(Over)

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**Distribution:**

CSU Presidents  
Vice Chancellor, Human Resources  
Executive Vice Chancellor/CFO  
Vice Presidents, Administration

All Without Attachments

- Where possible, the new draft classification standards provide general descriptions of work and reflect generic terms, rather than specific equipment, systems or technologies which can quickly outdate standards. Please provide feedback on where a more general term or phrase might be appropriate or where we may need more detail.
- As you review the drafts, please look to see if there is adequate differentiation between classifications within each series and across the different classification series.
- Please review the qualifications to determine if they are defined appropriately for each classification.
- Exposure to and dealing with hazardous materials common to the trades has been introduced into several standards. Please provide feedback on whether we have sufficiently covered this issue.
- Welding has been incorporated into classifications that require welding during the course of regular duties. These classifications include Electricians, Plumbers, Equipment Mechanics and similar classifications. This base level of welding typically does not require certification in welding. However, incumbents with a certification in welding may perform the full range of welding work regardless of their classification as defined in the classification standards.
- Once the revised classification standards have been finalized, a review of the apprentice classifications will be conducted to ensure consistency between those classifications and the new/revised trade classifications.

Campus and SETC feedback on the draft classification standards will be reviewed during the month of March 2000. As appropriate, revisions will be made and reviewed with subject experts and management advisory groups mid-April. It is anticipated the standards will be finalized in April and outstanding impact issues will be negotiated with the SETC.

Thank you in advance for your time and effort in reviewing these drafts. We look forward to hearing from you by **FRIDAY, MARCH 3, 2000**. Your input is critical to ensure the new classification standards meet your campus' needs. Please provide us with written comments via e-mail, regular mail or fax at (562)951-4954. If you have any questions regarding this technical letter, please contact Gina Caywood in Human Resource Administration at (562)951-4416 or via e-mail at [gcaywood@calstate.edu](mailto:gcaywood@calstate.edu).

CR/lb

Attachments

ATTACHMENT A

PROPOSED CLASSIFICATION OVERVIEW CHART  
UNIT 6 – SKILLED TRADES STUDY

**Standard Trade Series & Classes**

**Electrician Series**

Electrician I – 6533  
Electrician II – 6532  
Supervising Electrician – 6534

**Plumber Series**

Plumber I – 6549  
Plumber II – 6548  
Supervising Plumber – 6547

**Locksmith Series**

Locksmith I – 6642  
Locksmith II – 6643

**Carpenter Series**

Carpenter I – 6476  
Carpenter II – 6475  
Supervising Carpenter – 6474

**Painter Series**

Painter I – 6526  
Painter II – 6525  
Supervising Painter – 6524

**Mason** – 6616

**Blacksmith** – 6575

**Broader Trade Series & Classes**

**Facilities Services Series**

Facilities Worker I – replaces 6215 and 6212  
Facilities Worker II – new  
Facilities Services Specialist I – replaces 6940  
Facilities Service Specialist II – replaces 6941

**Facilities Work Group Supervisor** – new

**Equipment Mechanic Series**

Mechanics Helper – 6837  
Auto/Equipment Mechanic I – replaces 6851 & 6834  
Auto/Equipment Mechanic II – replaces – 6852

**HVAC Series**

Operations Mechanic – replaces 6703 and 6685  
HVAC Mechanic – replaces 6702  
Refrigeration Mechanic – revised 6699  
Facilities Control Specialist – new

**Metal Worker Series**

Metal Worker I – replaces 6596, 6584 and 6805  
Metal Worker II – replaces 6583  
Supervising Metal Worker – 6587

**Mechanical Systems Supervisor** – replaces 6700 and 6587

**ATTACHMENT B**

**DESCRIPTIONS OF PROPOSED CLASSIFICATIONS AND REVISIONS**

**Standard Trade Classifications**

The standard trade classifications include those classifications focused on one specific skilled trade. Some classifications are grouped into a series where similar work is performed. (Although grouped in a series, these classifications are separate classifications.) Within each of the series, typically journey, lead and supervising levels are defined. Where appropriate, consistent requirements for each classification are defined. The journey-level classifications cover the full range of skilled journey-level work for the applicable trade. The lead level, while performing skilled trade work, has the additional responsibility for leading a work crew comprised of skilled, semi-skilled and/or unskilled workers and preparing materials and supplies for projects. The supervising level is distinguished by the fact that the majority of time is spent supervising multiple projects with an additional focus in design and inspection related functions.

- **Electrician Series** – This series includes Electrician I (6533), Electrician II (6532) and Supervising Electrician (6534).
- **Plumber Series** – Includes Plumber I (6549), Plumber II (6548) and Supervising Plumber (6547).
- **Locksmith Series** – The series has been revised to reflect the introduction of key card access systems. It includes Locksmith I (6642) and Locksmith II (6643). The Locksmith II retains the additional responsibility for developing a master keying system.
- **Carpenter Series** – Includes Carpenter I (6476), Carpenter II (6475) and Supervising Carpenter (6474).
- **Painter Series** – Includes Painter I (6526), Painter II (6525) and Supervising Painter (6524).
- **Mason** (6616) – Remains a stand alone classification.
- **Blacksmith** (6575) – Remains a stand alone classification.

□ **Broader/Cross-Functional Trade Classifications**

Four new classification series and two new supervising classifications have been created to cover broad areas of work and are designed to provide campuses flexibility to organize and manage work. (Please be advised that a classification within a series may not be necessarily a continuation from the previous classification within the series. Again, classifications grouped in a series remain separate classifications.)

- **Facilities Services Series** – This series focuses on general facilities maintenance and renovation and covers the full range of semi-skilled to skilled generalist work in the mechanical and building trades. The title has been broadened to Facilities Services to recognize the performance of mechanical as well as building renovation functions. Four classifications are proposed for this series:
  - **Facilities Worker I** – This classification replaces the Building Maintenance Worker (6215) and Skilled Laborer (6212). Semi-skilled work across all trades is performed independently or incumbents may work under the direction of a journey-level crafts worker.
  - **Facilities Worker II** – This new classification provides a professional development path to the skilled Facilities Services Specialist I. It is distinguished by the performance of more complex cross-trade work at a semi-skilled level.
  - **Facilities Services Specialist I** – This classification replaces the Maintenance Mechanic (6940). The title has been changed to reflect the broader range of work performed related to mechanical systems, facilities systems and renovation. The language in the current Maintenance Mechanic classification is very mechanically focused. Typically, incumbents are skilled in one trade and are semi-skilled in other trades.
  - **Facilities Services Specialist II** – Incumbents in this classification perform lead functions and the most complex facilities services work often requiring journey-level skills in more than one trade. The work of the current Farm Maintenance Mechanic (6941) would fall under the umbrella of this classification. *There has been some discussion about whether two levels of Facilities Services Specialist are necessary. Campus input on this topic is needed.*
- **Facilities Work Group Supervisor** – This is a new classification. Incumbents perform supervisory and coordination functions for construction and renovation projects involving multiple trades. It is comparable to other supervising classifications.
- **Equipment Mechanic Series** – This series covers automobile and heavy equipment mechanics. It is comprised of three classifications.
  - **Mechanics Helper** – This classification is the semi-skilled Mechanics Helper (6837).
  - **Auto/Equipment Mechanic I** – As planned, this classification collapses the Automobile Mechanic (6851) and Heavy Equipment Mechanic (6834) classifications. This is a skilled journey-level mechanic classification.

- **Auto/Equipment Mechanic II** – This is a lead classification and replaces the current Lead Automotive/Equipment Mechanic (6952).
- **HVAC Series** – This proposed series includes the full range of classifications involved in operating, maintaining and repairing HVAC systems and their components. Because of growing HVAC systems automation, building automation functions have been integrated into all of these classifications.
  - **Operating Mechanic** - The first classification within the series covers the work performed by the current Operating Engineer (6703) and the Power Plant Operator (6685). It covers the more limited HVAC functions pertaining to the operation of boiler systems and power plants.
  - **HVAC Mechanic** – This classification replaces the current Building Service Engineer (6702). The title better reflects the work being performed within this classification and acknowledges the changes in technology.
  - **Refrigeration Mechanic** (6699) – This title has been retained because refrigeration is often viewed as a separate trade.
  - **Facilities Control Specialist** – This is a new classification at the same level as the Refrigeration Mechanic. Incumbents in this classification primarily monitor and control more complex building automation systems, including performing remote diagnostics and adjustments, but have the mechanical background to perform hands on repair when necessary. Because of the need to integrate building automation system functions into all classifications in this series, there is some debate as to whether this should be a separate classification. At this point, there is strong pressure from SETC to recognize the individuals who are performing these functions almost exclusively.
- **Metal Worker Series** – This series is comprised of two classifications and collapses the Fusion Welder, Sheet Metal Worker, Materials Fabrication Specialist, and Machinist into one broader metal working series to better reflect how work is being performed. The key objective is to provide more generic metal working classifications so campuses can use these resources effectively.
  - **Metal Worker I** – This first classification replaces the Fusion Welder (6596), Sheet Metal Worker (6584) and Machinist (6805).
  - **Metal Worker II** – This second classification replaces the Materials Fabrication Specialist (6583) and requires certification in welding.
- **Mechanical Systems Supervisor** – This supervising classification replaces the Supervising Building Service Engineer (6700) and Supervising Materials Fabrication Specialist (6587). This is a broader, more generic classification which includes responsibility for supervising one or more crews of skilled crafts worker engaged in the mechanical and metal working trades. Incumbents most often are responsible for supervising the operation of campus HVAC systems.

**ATTACHMENT C**

**SKILLED TRADES CLASSIFICATION STUDY OVERVIEW**

The skilled trades classification study has involved the gathering and analysis of extensive internal data and external comparisons.

**Internal Data Collection**

The internal data collection process has involved gathering position questionnaires and sample position descriptions from selected campuses, conducting campus site visits and reviewing the findings and analysis with the Facilities Management Advisory Group.

- Position questionnaires were gathered from six campuses system-wide: Sacramento, San Luis Obispo, Fullerton, Dominguez Hills, Los Angeles, and Bakersfield. Additionally, a test of the position questionnaire was conducted on the Pomona campus. About 150 questionnaires were returned with several individuals declining to participate. Substantial position questionnaires were received for most classifications, with the exception of the Operating Engineer and the metal working classifications. As a result, position descriptions were gathered from campuses using these classifications.
- Position descriptions were gathered from key campuses (Chico, Long Beach, Fresno, San Francisco and Northridge) for the Operating Engineer, Refrigeration Mechanic, Sheet Metal Worker, Materials Fabrication Specialist and Fusion Welder classifications.
- The Facilities Management Advisory Group included representatives from Stanislaus, Northridge, San Diego, San Marcos, Long Beach, and Monterey Bay. This group served as technical subject experts.
- Campus site visits were conducted on San Marcos, Fullerton, Long Beach, San Diego, and Monterey Bay.
- In addition, an ongoing Human Resource Advisory Group has provided input to the classification study from a human resource operational perspective. This group includes representatives from Dominguez Hills, Northridge, Bakersfield, Sacramento, Hayward, San Diego, San Bernardino, Monterey, San Luis Obispo and the Chancellor's Office.

**External Research**

Position descriptions were gathered from several municipalities and counties as well as the University of California system.