

**U.S. Office of Personnel Management  
Job Grading Appeal Decision  
Under section 5346 of title 5, United States Code**

**Appellant:** [Name of appellant]

**Agency classification:** Utility Systems Operator  
WG-5406-9

**Organization:** [Appellant's work organization/location]  
Veterans Health Administration  
Department of Veterans Affairs

**OPM decision:** Utility Systems Operator  
WG-5406-9

**OPM decision number:** C-5406-09-01

*//signed//* Judith A. Davis for

---

Robert D. Hendler  
Classification and Pay Claims  
Program Manager  
Merit System Audit and Compliance

4/25/11

---

Date

As provided in section S7-8 of the *Operating Manual: Federal Wage System*, this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government. There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in section 532.705(f) of title 5, Code of Federal Regulations (CFR) (address provided in the *Introduction to the Position Classification Standards*, appendix 4, section H).

**Decision sent to:**

[Appellant's name and mailing address]

[Address of appellant's servicing human resources office]

Mr. Adam Garcia  
Classification Team Lead  
Department of Veterans Affairs  
10770 North 46<sup>th</sup> Street, A400  
Tampa, FL 33617

Director  
Compensation and Classification Service (055)  
Office of Human Resources Management  
Department of Veterans Affairs  
810 Vermont Avenue N.W., Room 240  
Washington, DC 20420

## **Introduction**

On October 8, 2010, the San Francisco Oversight office of the U.S. Office of Personnel Management (OPM) accepted a job grading appeal from [name of appellant]. On November 16, 2010 we received the agency's complete administrative report. The appellant's job is currently graded as Utility Systems Operator, WG-5406-9, but he believes his equipment operating and repair duties and "operator in charge" responsibilities warrant grading his job as Utility Systems Repairer-Operator, WG-4742-11. He works in the [appellant's work organization/location] Veterans Health Administration, Department of Veterans Affairs (VA). We have accepted and decided his appeal under section 5346 of title 5, United States Code (U.S.C.).

## **General issues**

The appellant contends that similar jobs in other agencies and organizations are graded at a higher level, thus his job should be higher graded. In adjudicating this appeal, our responsibility is to make our own independent decision on the proper classification of this job. By law, we must make that decision solely by comparing his current duties and responsibilities to appropriate job grading standards (JGS). *See* 5 U.S.C. 5346. Since comparison to JGSs is the exclusive method for grading jobs, we cannot compare the appellant's job to others in different agencies which may or may not be properly graded as a basis for deciding this appeal.

Like OPM, the appellant's agency must classify positions based on comparison to OPM's job grading standards (JGS) and guidelines. Consequently, the appellant's agency has primary responsibility for ensuring its positions are graded consistently with OPM appeal decisions. If the appellant believes his job is graded inconsistently with others, he may pursue this matter by writing to the VA's headquarters human resources office. He should specify the precise organizational location, series, title, grade, and responsibilities of the jobs in question. The agency should explain to him the differences between his job and the others, or grade those jobs in accordance with this appeal decision.

## **Job information**

Both the appellant and his supervisor have certified to the accuracy of the appellant's official job description (JD) [number] including the addendum. The appellant operates and performs operator maintenance and repair on the [name of appellant's installation] heating and air conditioning equipment to ensure adequate steam, high temperature hot water (HTHW), and air cooling capacity at the facility. He starts, regulates, controls, and maintains three 18,000 pound (110 psi) water tube natural gas fired power boilers (oil is the backup fuel) and associated components. The boilers have an automated master control system (Fyre-rite) that controls stack temperature, operating temperature, monitors steam flow and emissions of carbons, and controls water and steam pressures. His duties include performing gas tests; taking and recording boiler gauge readings; observing flow meters and charts; resetting temperature and steam controls for proper humidity; performing various water chemical tests and adding chemicals as necessary; ensuring water softening equipment is operating properly; and doing maintenance such as installing some parts and gauges and adjusting motors and pumps. The boilers have a variety of fully automated auxiliary equipment including feed water pumps, electronically controlled air

compressors and water control dampers, de-aerating and condensate tanks, and pollution control devices.

The appellant also operates a centralized multiple-zoned air conditioning system consisting of cooling towers and four chillers totaling 3,455 tons of refrigeration. His duties include operating and maintaining the chillers and cooling towers, controlling temperatures and humidity at the facility, operating the air handling equipment, detecting malfunctions in equipment, and regularly recording return temperature and pressure of air, and oil and pump pressures. The air conditioning system serves a variety of medical center areas including hospital and operating rooms, clinics, and intensive care wards. In addition, the appellant monitors the quality of water received from the city of [name of city] for domestic use (drinking, bathing) at the facility by checking it for contaminants (e.g., dirt, sludge, oxygen) after it has passed through a contractor-provided reverse osmosis and de-ionizing filtration system. He also back flushes the domestic water at the facility once a week to remove contaminants by re-circulating it through the filtration system.

The appellant is assigned to rotating shifts (day – 8 am to 4 pm, “swing” – 4 pm to 12 pm, and “graveyard”- 12 pm to 8 am). The supervisor is present only during the normal work week day shift. During swing and graveyard shifts (and on holidays and weekends) he or another employee on the shift (two per shift) assumes full responsibility for operation of the plant. He makes decisions on emergency repairs and may call back employees. He responds to fire alarms and service calls throughout the facility after normal working hours. These may include responding to elevator faults (e.g., elevator stuck between floors); replenishing medical gases on an emergency basis; loss of utilities (e.g., lights), clogged plumbing, failure of automatic doors, tripped electrical breakers, and testing hazard isolation rooms for possible escape of contaminated air.

In reaching our decision, we carefully reviewed all information provided by both the appellant and his agency, including the appellant’s JD of record. We find the JD contains the major duties and responsibilities assigned by management and performed by the appellant and hereby incorporate it by reference into this decision. In addition, to help decide the appeal we conducted separate telephone interviews with the appellant and his immediate supervisor.

### **Occupation, title, and standard determination**

The agency allocated the appellant’s job to the 5406 Utility Systems Operating occupational series, titling it Utility Systems Operator. The appellant disagrees and asserts that because he performs maintenance and repairs on boilers and air conditioning equipment his job should be allocated to the 4742 Utility Systems Repairing-Operating occupational series, and titled Utility Systems Repairer-Operator.

The 4742 occupational series covers non-supervisory work that primarily involves repairing and operating one or more utility systems (air conditioning, heating, water, wastewater, etc.). Such work requires the ability to start, stop, and regulate the utility or utilities for optimum efficiency and troubleshoot, maintain, and repair them. Work requires knowledge of user requirements and the locations and functions of all equipment in the system(s) and the repair procedures and

specifications. Work in this occupation includes a combination of at least two trade practices (repair work and operation), with the grade level of work performed in utility repair and operation evaluated at the same grade level by reference to the appropriate JGSs. The combined utility repair and operation must represent the highest grade level of work performed in the job.

The 5406 occupational series covers non-supervisory work concerned primarily with operating two or more utility systems such as boiler plants, air conditioning, wastewater treatment, water treatment, and natural gas distribution systems for large buildings or small complexes, on a continuing basis. Operators must be familiar with and have the abilities to adjust and regulate a variety of automatic or manually controlled auxiliary equipment to insure maximum operating efficiency of the systems. The 5406 JGS covers those jobs that entail operation of two or more utility systems, evaluated at the same grade level by reference to the appropriate JGSs, when no single skill or knowledge of a single utility is predominant for recruitment, promotion, reduction-in-force, pay setting, and other personnel processes.

We find the appellant's work does not warrant allocation to the 4742 occupational series because his duties are limited to operating and performing operator-level maintenance of boilers and air conditioning equipment. Unlike jobs coded to the 5309 Heating and Boiler Plant Equipment Mechanic occupational series, his work does not involve installing, performing major maintenance, repairing, extensive troubleshooting, and modifying single and multiple fuel heating and power boilers and associated auxiliary and pollution control equipment. Such work requires knowledge of the principles of combustion and heat transfer, and the ability to recognize and determine the best method for correcting malfunctions and the skill to install and repair a variety of heat and power producing systems and support equipment. Work described at various grade levels in the 5309 JGS includes applying knowledge and skill to install and repair defective burners, switches, fuel lines, motors, blowers, pneumatic and mechanical controls on heating boilers. At the higher grade, power plant equipment mechanics install, maintain, and repair power boilers that have complex equipment and systems. They have extensive auxiliary and pollution control equipment, e.g., induced draft fans, conveyor belts, pre-heaters, coal pulverizing equipment, air compressors. They examine, adjust, repair or replace thermostats, governors, switches, burners, fuel feed controls, steam seals, bearings, gears, and nozzles. Higher graded mechanics also balance and align turbines, pumps, generators, compressors, and replace controls and relief valves.

The appellant's duties in operating and maintaining the facility's air conditioning equipment do not meet the scope of duties typical of those coded to the 5306 Air Conditioning Equipment Mechanic occupational series. Unlike jobs in the 5306 series, his duties do not include repairing and modifying a variety of equipment and systems used to regulate climatic conditions. Although he must understand the principles of air conditioning, his work does not require the ability to recognize and determine the best method for correcting malfunctions and the skill to make repairs to a variety of air conditioning and cooling unit systems. Air conditioning equipment mechanics at various grade levels in the 5306 occupation install, repair, and replace major portions of cooling units, e.g., compressors, condensers, valves, coils and drive assemblies. At higher grades mechanics deal with larger projects with more complex problems requiring extensive repairs, e.g., repairing and reassembling pumps, impellers, compressors, chillers, receivers, and evaporators. Repairs of that kind may involve installing and fitting

connecting rods, crank shafts, piston rings, bearings, and bushings. In contrast, the appellant's duties are limited to operator maintenance and equipment adjustments. In addition, any substantial maintenance or repairs to the facility's air conditioning equipment is performed by a staff of four Air Conditioning Equipment Mechanics, WG-5306-10, who are assigned to the installation's Electric and Electronics/HVAC Units.

As previously discussed, the appellant monitors the quality of water received from the city of [name of city] for domestic use at the facility. However, his duties are limited to back flushing water in the hospital's domestic water system to check for contaminants (which he indicated are rarely found) but adding no chemicals and performing no tests for the presence of other substances, e.g., chlorine, fluoride. Water volume is pumped and controlled through the system automatically, and equipment maintenance is not required on a regular basis. Because the appellant's duties for monitoring the domestic water supply are so limited, they do not meet the full scope of work (even at the lowest grade 7 level) typical of that coded to the 5409 Water Treatment Plant Operator occupational series. Jobs in this series cover nonsupervisory work involved in the operation of water treatment facilities and plants to treat or pump water for domestic or industrial use. The appellant does not work at such a facility and consequently his tasks do not entail the breadth of duties performed by employees whose work is coded to the 5409 occupational series. Therefore, they have no impact on the title, series, or grade of his job and thus we have not evaluated them in this decision.

The appellant states that when working on any shift other than the day shift, he may be called upon to perform a variety of miscellaneous "emergency" tasks because no other skilled trades person is immediately available. His tasks include responding to faulty elevators, loss of lighting in a particular area, tripped electrical breakers, unclogging commodes, sinks or drains, etc. We view these duties as incidental to his primary duties. They are performed only in the absence of qualified personnel; are not done on a regular and recurring basis; are basic in nature and do not involve application of the full scope of knowledge and skill typical of the occupations involved, e.g., plumber, electrician, elevator mechanic. For these reasons the appellant's collateral duties have no impact on the title, series, or grade of his job and thus we will not address them further in this decision.

Because the appellant performs only operator-level maintenance and does not repair boilers and air conditioning equipment to the extent described above, his job is not covered by the 4742 occupational series.

The appellant's job meets the requirements for coverage by the 5406 occupational series. Like this series, he performs nonsupervisory work concerned primarily with operating two utility systems, (i.e., boiler plants and air conditioning) for a large hospital building. In doing so he applies the knowledge and skills of work typical of that in the 5402 Boiler Plant Operating series and the 5415 Air Conditioning Equipment Operating series. He operates both power boilers and industrial air conditioning equipment, and adjusts and regulates a variety of auxiliary equipment for both systems to ensure maximum operating efficiency. Neither one of the skills exercised is predominant for recruitment, promotion, reduction-in-force, pay setting, and other human resources processes, and as discussed later in this evaluation the operation of the two utility

systems is evaluated at the same grade level. The prescribed title for jobs in the 5406 series is Utility Systems Operator.

### **Grade determination**

Jobs in the 5406 series are graded by application of the JGSs appropriate for the trades involved. As discussed above, the appellant's primary duties involve work covered by the 5402 and 5415 series. Each JGS for those two series does not describe all possible grade levels for the occupation. If jobs differ substantially from the skill, knowledge, and other work requirements described in the grade levels of each JGS, they may be graded either above or below the described grades based on application of sound job grading principles. Both the 5402 and 5415 JGS provide for grade-level determination on the basis of four factors: Skill and Knowledge, Responsibility, Physical Effort, and Working Conditions. Our application of the two standards to the appellant's job follows.

#### 5402 Boiler Plant Operating

##### *Skill and Knowledge*

Grade 8 boiler plant workers require a working knowledge of the structure and operating characteristics of boilers and associated auxiliary equipment, including the location and function of numerous pumps, valves, regulators, gauges, recording instruments, controls, power operated dampers, conveyors, and other equipment associated with clean, safe, and efficient boiler operation. Grade 8 work entails: (1) knowledge of fuel handling and distribution equipment and systems, fuel firing mechanisms, feed water treatment systems, electrostatic precipitators, flue gas scrubbers, and lime slurry systems; (2) a basic knowledge of the chemical and physical characteristics of fuels and principles of combustion, steam generation, and heat transfer; (3) a working knowledge of the relationship between fuel quality and efficient combustion characteristics; (4) a working knowledge of water tending, analysis, and basic chemical treatments; (5) a general understanding of the individual and combined effects of chemical additives; and, (6) knowledge of basic operations necessary on start-up, shutdown, and re-start procedures and in casualty control. Grade 8 workers have skill in: (1) adjusting various conditions such as air temperature, draft, and other furnace conditions; (2) interpreting meter and gauge readings; (3) using hand tools, electric and pneumatic power tools, and specialized tools of the trade; and, (4) applying preventive maintenance procedures and performing limited operational repairs such as cleaning equipment, greasing and oiling moving parts of machinery, re-painting equipment, tightening packing bonnets and glands on valves and pumps, re-packing valves, replacing pumps, and assisting higher grade workers in more difficult repairs and replacements. They are able to recognize malfunctioning equipment and systems and potentially dangerous operating conditions.

Grade 10 boiler plant operators apply a comprehensive knowledge of all operational phases of power boiler plant operations, (e.g., water treatment, fuel systems, steam generation, and pollution control) and their interrelationships for efficient and economical generation of steam or high temperature hot water (HTHW). They apply knowledge of the principles and theories pertaining to combustion, heat transfer, and steam or HTHW generation in the operation of

power boiler plants. Grade 10 employees also apply a thorough knowledge of the structural and operating characteristics of single and multiple fuel power boilers and associated auxiliary and pollution control equipment or systems (e.g., computerized or microprocessor control systems, fuel handling and distribution equipment and systems, fuel firing mechanisms, feed water and boiler water treatment systems, steam and electrical pumps, pressurization systems, compressors, electrostatic precipitators, and flue-gas desulfurization systems) to properly operate, adjust, troubleshoot, and maintain the equipment and systems. They apply a thorough knowledge of water treatment procedures and water analysis, using standard chemical tests. They have a thorough knowledge of water treatment equipment and systems, e.g., cation/anion exchange units for demineralization of feed water. Grade 10 operators have a thorough knowledge of chemical and physical aspects of sulfur-containing fuels (e.g., oil, coal, lignite), the chemical reactions involved in combustion, and the relationship between fuel quality and combustion efficiency. They have: (1) a practical knowledge of environmental law and a thorough knowledge of procedures or adjustments during combustion to control pollutants in flue emissions (e.g., control combustion time, stack temperature, and excess air flow); and, (2) a thorough knowledge of the steam or HTHW distribution systems, user requirements, casualty control procedures, and how to bypass a section of the system to maintain service. They are knowledgeable of maintenance requirements (e.g., cleaning fuel guns, lubricating equipment, and power cleaning water tubes) and procedures necessary to perform operational repairs of limited to moderate complexity, e.g., repair or replace valves, gauges, water pipes, and refractory linings. In some work situations, operators at this level may have basic knowledge of electricity to test and replace wires, switches, and other basic electrical components.

Grade 10 operators have skill: (1) in procedures and adjustments necessary to start, operate, and maintain a power boiler facility (i.e., power boilers and auxiliary and pollution control equipment) to meet load demands and maintain efficient levels of combustion and compliance with pollution laws; (2) in operating power boilers from cold starts through normal operation and hot or emergency shut downs; (3) in operating and adjusting associated auxiliary and pollution control equipment; (4) in reading and analyzing information from gauges, meters, recorders, analog displays, and computer generated data to determine the operational status of the facility and necessary adjustments; (5) in specialized combustion techniques and adjustments to firebox variables such as fuel flow or feed, fuel/air ratio, temperature, combustion time, and over air or under air feeds to control chemical pollutants in flue gas emissions and maintain combustion efficiency; (6) in setting and adjusting flame patterns in power boilers with single or multiple burners to ensure safe and efficient combustion; and, (7) in adjusting various combustion settings to compensate for varying qualities or conditions of fuels. Grade 10 operators can: (1) stabilize boilers in a closed system when one boiler starts to go down while maintaining safe levels and efficient combustion; and, (2) make individual and sequential adjustments to a variety of controls and equipment to achieve and maintain maximum efficiency of equipment and systems being operated.

The appellant's knowledge and skill substantially exceeds the grade 8 level but does not fully meet the grade 10 level. Unlike the grade 8 level and similar to the grade 10 level, the appellant applies a comprehensive knowledge of many of the operational phases of power boiler plants. He is knowledgeable of water treatment procedures and analysis, steam generation including production and distribution of HTHW, and fuel systems for multiple fuel boilers including some



of their auxiliary equipment, (e.g., steam and electrical pumps), and performs required maintenance and operational repairs, e.g., lubricating pumps, power cleaning water tubes, replacing valves or gauges. He is skilled in the procedures and adjustments needed to start, efficiently operate, and maintain power boilers to meet load demands, including reading gauges and making changes in combustion. However, in contrast to the grade 10 level the appellant is not required to have knowledge of a variety of pollution control tasks and equipment associated with operation of power boilers. Because the primary fuel used to run the boilers is clean burning natural gas (with highly refined fuel oil used only one day a month on a test basis), his duties do not include operating complex pollution control equipment and applying knowledge of the procedures and adjustments needed to control pollutants generated by continually burning sulfur-containing fossil fuels, e.g., oil, coal, and lignite. Because of the clean nature of gas the appellant does not have to use or be knowledgeable of auxiliary equipment such as compressors, electrostatic precipitators, and flue-gas desulfurization systems. In addition, because the Fyre-rite automated master boiler control system automatically controls combustion time, stack temperature, air flow, emissions of carbons, re-circulates any pollutants (noxious material) for additional burning, and controls boiler steam and water pressure, unlike the grade 10 level the appellant does not need to possess a thorough knowledge of the procedures or adjustments during combustion to control pollutants in flue emissions. In order to deal with occasional smoke or other pollutants the appellant simply adjusts fuel valves or dampers which control air to the combustion process. Because this factor substantially exceeds the grade 8 level, but does not fully meet the grade 10 level, it is properly credited at the grade 9 level.

### *Responsibility*

Grade 8 boiler plant workers receive work assignments from a supervisor or a higher grade worker in the form of written or oral instructions. The instructions outline the work to be performed and the methods and materials to be used. Workers at this level are responsible for observing meters and gauges to insure proper combustion and prescribed temperatures, pressures, and emissions and for performing routine operator maintenance of equipment. They are responsible for understanding and responding to a variety of conditions indicated by meters and gauges. Workers are alert and recognize dangerous conditions in boilers, controls, valves, piping and other equipment inherent to boiler operations to prevent equipment damage or explosion. They perform work in accordance with local, state, and Federal pollution control requirements. Problems are reported to a higher grade worker or supervisor. Work at this level is checked through observation of work methods and procedures. A higher grade worker or supervisor is available for advice and assistance on any work problem encountered and checks to see that assignments are completed according to instructions and established practices.

Grade 10 boiler plant operators receive work assignments from a supervisor or a higher grade operator who is in charge of the facility or work shift. They provide written or oral instructions which may be accompanied by diagrams, drawings, operating manuals, or special facility procedures to be followed during emergencies, equipment failure, or system malfunction. They are familiar with the total plant layout including drawings and circuit diagrams of the boilers and auxiliary and pollution control equipment, in order to locate problems and determine appropriate action necessary to maintain adequate steam or HTHW production. As compared to the predetermined methods and procedures at the grade 8 level, grade 10 boiler plant operators make

more independent decisions and judgments regarding boiler plant operations (e.g., combustion and pollution control adjustments, troubleshooting techniques, and equipment maintenance and repair procedures). In maintenance and repair operations, they complete all work in accordance with required specifications and use a variety of standard mechanical and basic electrical processes. Boiler plant operators at this level typically have primary responsibility for checking boilers and auxiliary and pollution control equipment to insure the operational efficiency of equipment and safety of personnel. They take immediate action to prevent interruptions to plant operations and report all emergencies or dangerous conditions. The supervisor or higher grade operator with shift level responsibility is usually available to provide technical assistance on difficult or unusual problems. Work is checked through occasional observation of operational efficiency, production reports, and adherence to established operating techniques and procedures.

The appellant's responsibility substantially exceeds the grade 8 level but does not fully meet the grade 10 level. Unlike the grade 8 level, he fully operates the boiler plant in accordance with accepted methods and procedures on shifts where the supervisor is not present. Similar to the grade 10 level, the supervisor provides oral or written instructions which sometimes include diagrams and maintenance checklists. Like the grade 10 level, the appellant is familiar with the entire layout of the boiler plant including diagrams of the boilers and auxiliary equipment in order to locate problems and take necessary actions to maintain steam and HTHW production. In contrast to the grade 8 level, he makes independent decisions on boiler operating adjustments, maintenance, and equipment repair in accordance with required specifications. The supervisor checks work through observation, and completion of work orders and maintenance instructions (checklists). Although the appellant is responsible for complete boiler plant operations typical of the grade 10 level, the auxiliary systems which he operates do not include the extensive pollution control equipment and resulting decisions on procedures needed to ensure clean burning of the variety of fuels found at the grade 10 level. Therefore, because the appellant's job exceeds the grade 8 level but does not fully meet the grade 10 level, this factor is credited at the grade 9 level.

#### *Physical Effort*

Physical effort is the same at both the grade 8 and 10 levels. Grade 8 boiler plant workers frequently work in confined areas in and around boilers and support equipment, i.e., auxiliary and pollution control equipment. The work requires moderate to strenuous effort and long periods of walking, standing, climbing, bending, and crouching. Workers frequently lift and carry boiler parts and chemical supplies weighing up to 18 kilograms (40 pounds) unassisted and occasionally items weighing over 18 kilograms (40 pounds) with assistance of other workers or weight handling equipment. The appellant's job meets this level.

Because this factor is the same at both the 8 and 10 grade levels, it has no significant impact on the overall grade level of the appellant's job.

#### *Working Conditions*

Working conditions are the same at both the grade 8 and 10 levels. Grade 8 boiler plant workers work indoors and occasionally work outside for short periods where they are subject to

prevailing weather conditions. Workers are subject to high temperatures, constant noise, rotating machinery, soot, dirt, grease, chemicals, oil, and fumes in the work area. Boiler plant workers at this level are subject to cuts and abrasions from the use of tools and equipment and burns from acids, caustics, hot water, steam, and contact with piping and boilers. In addition, they work on catwalks and ladders. The appellant's job meets this level.

Because this factor is the same at both the 8 and 10 grade levels, it has no significant impact on the overall grade level of the appellant's job.

Based on application of the job grading criteria in the 5402 JGS, we find the appellant's boiler plant operating duties are properly evaluated at the grade 9 level.

#### 54 15 Air Conditioning Equipment Operator

##### *Skill and Knowledge*

Grade 9 level air conditioning equipment operators know the function, purpose, and location of all equipment in the system operated. Typical examples of equipment are absorbers or centrifugal compressors, starters, circuit breakers, condensers, evaporators, heat exchangers, chilled water and condenser water pumps, filters, fans, controls, motors, thermostats, humidifiers, cooling towers, heating and cooling coils, recorders, and alarms. They know the principles of the functioning of refrigeration and air conditioning equipment and component systems as well as the principles underlying the electrical or steam feeder distribution system to the chiller plant.

Operators at the grade 9 level know how to operate and perform minor repairs on the air conditioning equipment with a minimum of guidance from the supervisor. They have skill in the use of measuring instruments and testing equipment such as flow meters, recording meters, micrometers, psychrometers, velometers, and electronic leak detectors. Operators at this level have skill in controlling plant operations from the control center without causing damage to plant equipment. They are also skilled in the use of various hand and power tools including those associated with pipefitting.

Grade 9 level operators detect malfunctions on equipment and locate and diagnose operational problems to determine the probable cause of trouble and make necessary adjustments or minor repairs. They read and interpret blue prints, diagrams, schematic drawings, water flow charts, and specifications regarding servicing and operation of the refrigeration and air conditioning equipment.

Grade 10 level air conditioning equipment operators have a thorough knowledge of the functions and procedures necessary to run a centralized, multiple zone air conditioning system that contains more components, controls, gauges, and auxiliary equipment than the standard type, and the capacity of chillers or absorbers substantially exceeds the conventional. The operators know the operating principles of a variety of steam, gas, diesel, and electrically driven compressors and absorbers, including steam driven centrifugal compressors and the safety considerations involved in use of steam. They can troubleshoot the more unusual malfunctions in advanced equipment

and systems by using numerous testing techniques and items of test equipment; they can quickly and expertly pinpoint sources of trouble, whether in the controls or equipment itself and determine the nature and extent of repairs or adjustments needed.

The appellant's job meets the grade 9 level. Like that level he is knowledgeable of the functions, purpose, and location of all equipment of the medical center's centralized, multiple zone air conditioning system. Equipment includes absorbers, starters, circuit breakers, compressors, heat exchangers, chillers, condenser water pumps, controls, motors, thermostats, humidifiers, cooling towers, recorders and alarms. In operating the system, he applies knowledge of the principles of refrigeration and air conditioning equipment and components, and the principles underlying the electrical distribution system of the chiller plant. Similar to the grade 9 level, the appellant operates and controls the air conditioning equipment through master control panels which control temperatures in various zones of the medical center. He starts and regulates air flow and exercises skill in the use of measuring instruments to monitor temperature, air, oil and pump pressure, test water in the cooling towers (adding chemicals as necessary), compute tonnage of freon gas, and record air/water temperature and electrical usage (amps). He detects malfunctions of air conditioning equipment and performs adjustments or minor repairs including changing belts, pumps and electric motors with minimum guidance from the supervisor. Like grade 9 operators such repairs require that he read diagrams, schematic drawings, and specifications governing the servicing and operation of the equipment.

The appellant's job does not meet the grade 10 level. Unlike that level, because he operates a standard type air conditioning system having a conventional number of components and auxiliary equipment, he is not required to have a thorough knowledge of the functions and procedures needed to run a highly complex system containing an unusual number of components, controls, and related equipment with substantially greater capacity of chillers and absorbers. In addition, because the system is powered solely by electricity he is not required to know the operating principles and safety considerations of steam and gas powered equipment, including steam driven centrifugal compressors. Given the standard types of equipment he operates, he is not required to troubleshoot unusual malfunctions in advanced and more complex equipment and systems operated at the grade 10 level.

### *Responsibility*

Grade 9 air conditioning equipment operators receive work assignments from a supervisor or a higher grade operator. The supervisor occasionally spot checks work for adherence to operating techniques and established practices and directives. Operators at this level maintain continuous observation of all operating equipment to recognize dangerous operating conditions. They utilize drawings and circuit diagrams of the plant and auxiliary equipment to locate defects in equipment. When unusual problems occur, the supervisor provides technical advice and assistance.

Grade 10 level air conditioning equipment operators receive work assignments from a supervisor or a higher grade operator. Supervisory review is normally made only in emergency situations or of actions taken to resolve unique malfunctions. The unusual complexity of the system, combined with the variety of air conditioning requirements and greater amount of auxiliary

equipment, require constant attention by the operator and a higher degree of responsibility at this grade level than at the next lower grade level. Greater judgment and independent action is required on such matters as how to make interim repairs, when to shut down or activate equipment, and how to balance the more complicated systems found at this level

The appellant's responsibility meets the grade 9 level. Like that level, he receives work assignments from his supervisor through written and oral instructions. The supervisor occasionally spot checks his work by reviewing completed operating and maintenance log sheets recorded on each shift. Similar to the grade 9 level, the appellant continually observes operating equipment to recognize hazardous/dangerous operating conditions. He uses drawings and diagrams of the air conditioning plant to locate equipment defects. When unusual problems arise the supervisor provides technical advice or refers the appellant to the installation's air conditioning equipment mechanics.

The appellant's job does not meet the grade 10 level. Unlike that level, the appellant receives closer supervisory review (i.e., spot checks) than that reflected at the higher level. In addition, because the air conditioning system at the installation is not unusually complex as found at the grade 10 level, the appellant's work does not require the constant attention to equipment, and judgment and independent action described at the higher level.

#### *Physical Effort*

Physical effort is the same at both the grade 9 and 10 levels. At the grade 9 level, prolonged physical effort is not routine. Operators at grade 9 occasionally lift objects weighing up to 23 kilograms (50 pounds). Lifting equipment, such as chain hoists, is available to move heavier objects. Some sanding, stooping, bending, and work on ladders (occasionally over operating equipment) is required. The appellant's job meets this level.

Because this factor is the same at both the 9 and 10 grade levels, it has no impact on the grade of the appellant's job.

#### *Working Conditions*

Working conditions is the same at both the 9 and 10 grade levels. At the grade 9 level work is usually performed indoors with adequate light and ventilation. Operators at grade 9 occasionally work in areas of temperature extremes in the plant or are exposed to changes in temperature while working on outside cooling towers, roof exhausts, and ventilating fans. Noise level is often high, sometimes to the point of requiring ear plugs. Other protective devices such as goggles, masks, and gloves, may be needed periodically. They are exposed to the possibility of burns when working on steam and hot water lines. Operators are also subject to noxious gases, cuts, bruises, and scrapes. The appellant's job meets this level.

Because this factor is the same at both the 9 and 10 grade levels, it has no impact on the grade of the appellant's job.

Based on application of the job grading criteria in the 5415 JGS, we find the appellant's air conditioning equipment operating duties meet the grade 9 level.

### Special Additional Responsibilities

The 5406 JGS describes special circumstances which warrant crediting one additional grade to full performance level utility systems operator jobs when functioning as the "operator in charge" on second and third shifts and on weekends, whether they work alone or with a small group of utility systems operating employees. One operator is typically designated as the "operator in charge" of the complete plant including ancillary facilities, stand-alone, and satellite systems which may be geographically dispersed. The following conditions must be clearly met to warrant the crediting of an additional grade. The "operator in charge": (1) is responsible for following written instructions from a supervisor or the "operator in charge" on the previous shift; (2) performs additional duties that are more responsible and require a slightly higher level of skill and knowledge than full performance level operators who have a supervisor available for technical advice and guidance, and must have a thorough knowledge of the entire utility systems (e.g., steam, hot water, and air conditioning systems) and user requirements in order to locate problems and initiate immediate corrective action to maintain, in the appellant's case, adequate steam, hot water, or air conditioning production; (3) in the absence of written contingency procedures, has the responsibility to decide whether to shut down the operation (e.g., boiler plant or air conditioning system), or attempt to bypass the trouble until corrective action is completed if the equipment still in operation can handle the load; (4) determines what work must be done and has authority to approve overtime or call in necessary maintenance personnel; and, (5) relays instructions to the next shift operator, including problems encountered and action taken. "Operator in charge" shift responsibility must be assigned on a regular and recurring basis and only one operator on a shift can be assigned this responsibility.

The appellant's job does not meet all the conditions for crediting responsibility for "operator in charge." The appellant and one other coworker are regularly assigned to rotating shifts covering after hours and weekends, with each being at the full performance level. However, our fact-finding disclosed that neither employee is actually officially assigned as the single "operator in charge" for the shift. The supervisor prepares no written roster identifying which employee is to be the shift "operator in charge", nor does he verbally assign that responsibility to a particular shift worker. Because both shift employees are at the full performance level, the appellant and his supervisor stated the shift workers decide between themselves who will function as "operator in charge" with that person staying in the Graphics Control office to monitor equipment and answer calls, while the other acts as "runner" to physically respond to emergencies throughout the installation. Although the supervisor does not identify a particular employee as "operator in charge", when the appellant functions in that role like condition #1 he follows written instructions received from the supervisor (e.g., preventive maintenance work list) or the "operator in charge" from a previous shift, and like condition #5 relays instructions to the next shift operator including problems encountered and action taken.

The record indicates the appellant possess thorough knowledge of the steam, hot water, and air conditioning systems at the installation to locate problems and initiate corrective action, but his "operator in charge" duties regarding those systems do not require a slightly higher level of skill

and knowledge than the other full performance level operators (grade 9) who work with him on a shift. Both the appellant and his coworkers are at the same knowledge and skill level even when acting as “operator in charge.” Thus condition # 2 is not fully met.

When functioning as “operator in charge” the appellant can shut down a boiler or a portion of an air conditioning zone, respond to steam failures, and start another boiler or bypass a trouble spot in the air conditioning system. However, unlike condition #3 there are written contingency plans and operating procedures in place which he follows governing actions to be taken in the event of boiler or air conditioning equipment failures, and emergency measures required to keep the utilities operating, e.g., procedures for shutting down/starting-up another boiler, prioritizing service of steam, HTHW, or shifting and limiting air conditioning to certain zones. The written contingency procedures specify the circumstances when emergency actions are warranted, and include not only technical procedures but also written contingency plans issued by the Chief Engineer, Safety Officer, and Chief of Facility Maintenance Service prescribing procedures to follow in the event of utility failures. Because these written plans and procedures limit the extent of judgment needed to respond to equipment failures and utility emergencies, condition #3 is not met. The appellant notes that because he has to respond to a variety of utility problems at the facility occurring during after hours shifts, he should also be credited with “operator in charge” responsibility. Situations include unplugging clogged toilets and drains, stopping water leaks, and tripping circuit breakers to restore electrical power. However, condition #3 applies only to the operation of the utility systems covered by the 5406 series, and does not cover collateral responsibility including making minor repairs to other equipment at the facility on an irregular basis. For all the preceding reasons condition #3 is not met.

As previously discussed, under condition #4 the “operator in charge” determines what work must be done on the shift and is authorized to approve overtime or call in necessary maintenance personnel. The appellant is thoroughly knowledgeable of the steam, hot water, and air conditioning systems and is authorized to determine the scope of work to be done to those systems in the event of failures. He is also authorized to approve overtime for personnel already on site or recall personnel (from an emergency call back list) to perform work without obtaining supervisory approval or any other administrative clearances from installation staff. Therefore, his job meets condition #4.

In summary, we find that because all the conditions are not clearly met the appellant’s job cannot be granted additional credit for shift responsibility.

### *Summary*

By application of the job grading criteria in the 5402 and 5415 JGSs we find the appellant’s job is properly graded at the grade 9 level.

### **Decision**

The appellant’s job is properly graded as Utility Systems Operator, WG-5406-9.