OPERATIONS DIVISION

OD/SOP 08.06: Personnel Qualification

System DATE: August 31, 2016

PURPOSE
The purpose of this Operations Division Standard Operating Procedure (OD/SOP) is to set forth procedures for administration of the Utilities Personnel Qualification System (PQS). PQS serves to establish the guidelines, standards, and knowledge level required to operate the plants safely, reliably, and efficiently to our customers through training and advancement of our employees in accordance with principles of continuous improvement.

REVIEW
This OD/SOP will be reviewed in August of each year by the Director of Utilities and recommendations forwarded to the Assistant Vice President – Operations.

PROCEDURE
1. Definitions
   
a. **Utilities Trainee**: Entry-level position for new hires. A training plan will be developed as required.
   
b. **Advancement**: A promotion to a higher level of qualification.
      
      (1) This is normally accompanied by a minimum increase in salary as listed in the Utilities Operator pay plan chart below. Personnel, who complete a level of qualification before the allotted time and/or demonstrate exceptional performance, may be awarded higher levels of starting pay within the next qualification pay grade with approval of Operations Division upper management and the Assistant Vice President of Operations.

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<th>FY17 Minimum Pay Plan for Utilities Operator</th>
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<tr>
<td><strong>Title</strong></td>
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<tr>
<td>Utilities Trainee</td>
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<td>UO I</td>
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<td>UO II</td>
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<td>UO III</td>
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<td>UO IV</td>
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<td>Lead UO</td>
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(2) Completion of the PQS book alone does not guarantee promotion. An open position must exist and the appropriate supervisors must recommend an employee for advancement. This promotion will be based upon verified improvement in job performance and acceptance of increased responsibility.
(3) The duties and responsibilities of each Utility Operator (UO) pay grade are described in the respective Position Description. The pay grades and levels of qualifications are listed in the Texas Tech University, Texas Tech University Health Sciences Center Pay Plan.

c. **Assistant Operator:** Individual designated as the junior member of operating shift; assistant to the lead operator.

d. **Lead Operator:** Individual designated as responsible for an operating shift; under normal circumstances a Utility Operator II or higher.

e. **Oral Board:** A formal oral or practical examination of an individual’s knowledge, normally lasting one and one-half hours or as needed to properly evaluate the employee’s knowledge level. The Training Coordinator is responsible for scheduling and assigning board members. Board members have a responsibility to report to the board with a minimum of five prepared questions.

Representation on the board is listed below, but it must be understood that operational requirements may preclude this:

(1) **Level I:** To consist of a minimum of five (5) qualified lead operators who are senior in grade to the examinee. No maximum number of members for the board has been set but it should be representative of all plants. The Training Coordinator will act as non-voting recording secretary.

(2) **Level II:** To consist of a minimum of five (5) members of Utilities from the Director of Utilities, Superintendents, Managers, Training Coordinator, Supervisors, and Instrumentation Specialists. Board members should be representative of all plants. The Training Coordinator will act as voting board member and recording secretary.

(3) **Level III:** To consist of a minimum of seven (7) members: One (1) Assistant Vice President – Operations or Director (other than the Director of Utilities), three (3) representatives from management, and three (3) qualified plant operators who are equal to or senior in grade to the examinee. Board members will be representative of all plants. A level III board may be convened to review specific situations and disciplinary issues relating to this OD/SOP. A level III board may be requested by the individual in the PQS program, or by management. This board will thoroughly examine the individual’s knowledge and make a recommendation as to action to be taken for the individual, which may include restarting PQS, reclassification, or employment termination.

(4) **Requalification board:** To consist of a minimum of five (5) members: Two (2) qualified lead operators who are the same grade or senior in grade to the examinee, and two (2) members of Utilities management. No maximum number of members for the board has been set, but it should be representative of all plants. The Training Coordinator will act as voting board member and recording secretary.

f. **Watch Standing Review:** A detail review / testing process in which an employee is graded by several assigned board members as to their proficiency. The review will include Systems, General, and Basic Engineering Casualty Control Exercises (BECCE). The review process will normally last no more than 12 hours total in a 7 day shift rotation watch. It may be
conducted in lieu of an Oral Board at the request of the employee.

g. **PQS Book:** Written manuals, which include a User’s Guide and Qualification Sign-Off Books for Utility Operator I through Lead Utility Operator and Dual Plant Qualification. The User’s Guide is a standard booklet containing the minimum *questions* that must be *answered* and *performance* items that must be *performed*. The Qualification Sign-Off Book contains areas required for advancement to the next higher level of qualification. Each level of qualification (or pay grade) has a Qualification Sign-Off Book.

h. **Personnel Qualification System (PQS):** A training program implemented to ensure the safe, reliable, and efficient day-to-day operations of the central heating & cooling plants (CHACP’s). The program provides *minimum* standards for employees to qualify as Utility Operators. PQS is a compilation of engineering fundamentals, plant operating systems, and casualty control procedures for which adequate knowledge and understanding must be demonstrated through checkouts or by actual performance. A point system is used to monitor the employee’s progress on a monthly basis and is maintained by the Training Coordinator.

i. **Point System:** A point value assigned to each sign-off task. Overall progress is determined by the number of points accrued.

j. **Requalify:** All Utility Operator II through Utility Operator IV are required to requalify in their present pay grade every twelve months to ensure a minimum knowledge level is maintained. Requalification for Utility Operator I is not allowed per this OD/SOP. Specific exemptions for requalification may be granted by the Director of Utilities. Lead Utility Operators are not required to requalify as long as their performance evaluations are satisfactory. Personnel who hold Dual Plant Qualification are required to requalify on their non-primary plant every twelve months to ensure minimum knowledge level is maintained. Employees who are not currently enrolled in, and current in the PQS program, or have not completed qualification to Lead Utility Operator, will requalify by means of either an exam administered by the Training Coordinator or an oral board. The exam or board will be used as a guideline to measure adequate knowledge of the individual. If the exam or board is not passed, the employee will be given 30 days to prepare before a re-test or re-board is scheduled. If not passed a second time, the Training Coordinator will coordinate with supervisors to establish remedial training as necessary.

k. **Dual Plant Qualification:** Once personnel have qualified for Lead Utility Operator in their assigned (primary) plant, they may request to become Dual Plant Qualified by completing the requirements at the other plant (non-primary plant).

l. **PQS Program Pace:** Progress toward advancement and staying current with required points is the responsibility of each individual. Progress toward advancement can be performed in a more expedient manner, but at a minimum will meet the following:

1. Each PQS level will be completed in no more than 18 months and no less than 6 months including completion of oral board.
2. Individuals must attain the minimum required points for their particular PQS level, remaining at least 0% ahead or 0 days ahead at all times.

m. **Signature Authorization:** Employees authorized to sign-off areas of expertise are listed in the OD/SOP 08.06
PQS Sign-Off List posted at each central plant. Individuals will be tested on their knowledge of a specific area prior to being placed on this list. The Training Coordinator is responsible for ensuring this list is updated quarterly. No employee shall sign off an area for which they are not authorized via the PQS sign-off list. Individuals qualified Lead Utility Operator and above may sign off any area in which they deem themselves technically proficient, unless specific individuals are designated as signees on the list for those areas.

n. Examination: A formal examination that will be administered prior to an oral board.

o. Lead Utility Operator: A senior plant operator that possesses expertise of practical plant knowledge, operations and leadership skills. Ability to fill in as the supervisor when assigned.

2. Rules

a. All utility plant operators are subject to this standard operating procedure and are required to complete PQS through the level of UO II and be designated as qualified lead operator in the allotted time. Employees, UO II and above can choose to discontinue in the PQS program however will not be allowed re-instatement in the program for 12 months without permission from the Director of Utilities. All employees actively enrolled in the PQS program must abide by all rules described in this OD/SOP.

b. Qualification Sign-Off Books will be turned in to the Training Coordinator at the monthly safety meeting. Failure to do so will result in zero progress points awarded for that period and an entry documenting the occurrence will be entered in the employee’s personal file. Supervisors will ensure the entry is made. Points will be totaled and recorded, and the Sign-Off Books will be returned to the employee(s) within three (3) working days. Each month, progress charts will be routed to all supervisors and posted in each central plant.

c. New Qualification Sign-Off Books will not be issued until all requirements are met for the present pay grade. This is to prevent an employee from working on two qualification levels at the same time. Once an employee is issued their next level of Qualification Sign-Off Book, they will not be required to attain any PQS points until the second monthly safety meeting following the date the book was issued.

d. Each section in the Qualification Sign-Off book requires two signatures. Employees authorized to sign-off specific areas will sign the signature lines only. Authorized employees (different from the one who signed the signature line), Lead Utility Operator, supervisor, and above are allowed to sign the signature or final qualification lines of any area. No employee may sign both the signature line and the final qualification line for a given topic.

e. Completion of all requirements for advancement does not automatically guarantee a promotion. An open position must exist, and a recommendation for promotion must be approved by supervisory personnel through the Director of Utilities and the Assistant Vice President for Operations. Overall job performance, i.e., attendance, reliability, leadership ability, behavior, and other disciplinary actions (or pending) will be considered. Required performance changes prior to promotion will be outlined with a plan of action and milestones with specific dates for accomplishment.
f. Re-qualifiers will be notified by the Training Coordinator at least one (1) month prior to the requalification deadline in order to begin a review process. If the person requalifying fails to schedule a requalification exam, the exam or board will be administered as scheduled by the Training Coordinator.

3. Advancement (Minimum requirements for advancement to next pay grade)

a. From Utilities Trainee to Utility Operator I
   (1) Complete UO I PQS book
   (2) Be recommended by supervisors
   (3) Pass UO I exam
   (4) Pass a Level I oral board, or watch standing review
   (5) Complete a minimum of 40 hours proper watch standing
       (assigned to the lead/assistant operator on shift)

b. To Utility Operator II
   (1) Complete UO II PQS book
   (2) Be recommended by supervisors
   (3) Pass UO II exam
   (4) Pass a Level II oral board, or watch standing review
   (5) Complete one shift rotation (four [4] months) as an Assistant Operator

c. To Utility Operator III
   (1) Complete UO III PQS book
   (2) Have applied for or be enrolled in and remain current, or have completed PP Apprenticeship Program for UO
   (3) Be recommended by supervisors
   (4) Pass UO III exam
   (5) Pass a Level I oral board, or watch standing review
   (6) Complete one shift rotation (four [4] months) as a lead
   (7) Requalification required every twelve (12) months

d. To Utility Operator IV
   (1) Complete UO IV PQS book
   (2) Be enrolled in and remain current, or have completed PP Apprenticeship Program for UO
   (3) Be recommended by supervisors
   (4) Pass UO IV exam
   (5) Pass Level II oral board, or watch standing review
   (6) Requalification required every twelve (12) months

e. To Lead Utility Operator
   (1) Complete Lead Utility Operator PQS book
   (2) Be enrolled in and remain current, or have completed PP Apprenticeship Program for UO
   (3) Be recommended by supervisors
   (4) Pass Lead Utility Operator exam
   (5) Pass Level II oral board, or watch standing review
(6) Requalification not required
(7) Be enrolled in or completed the Operations Division Supervisory Training Program

f. Dual Plant Qualification

(1) Participation in Dual Plant Qualification is voluntary.
(2) Personnel shall be qualified as a Lead Utility Operator and have stood at least two full four (4) month rotations in the past 18 – 24 months as a Lead Operator in their assigned plant prior to consideration for Dual Plant Qualification.
(3) If a person wishes to participate in Dual Plant Qualification, they must submit a request to participate via the chain of command through the Training Coordinator to the Director of Utilities.
(4) Once approval of the Director of Utilities is received, the Training Coordinator will issue a Dual Plant Qualification Book. There will be no tracking of progress toward completion; however, personnel should make every effort to complete the book in a timely manner not to exceed 18 months.
(5) Once the person has received all required signatures in the Dual Plant Qualification book, they will be designated as Dual Plant Qualified. A letter to increase pay by $0.50/hour will be submitted for approval.
(6) Dual Plant Qualified Personnel are required to requalify every twelve (12) months with a three (3) month grace period. Requalification will consist of one (1) watch of at least eight (8) hours at the non-primary plant with a discussion period of plant operations with the Operations Supervisor of the non-primary plant. Vacation and sick leave coverage in the past rolling 12 months can be considered by the Operations Supervisor for requalification watch time. Both Plant Operation Supervisors will be responsible to schedule the requalification watch time for each dual plant qualified operator.

4. Examination

a. A minimum test score of 80 percent is required to successfully pass the exam. The Training Coordinator will maintain a library of questions from which advancement and requalification exams will be compiled. A formal examination will be administered prior to an oral board or practical examination. Advancement exams will consist of 100 questions, of which approximately 75 percent will be multiple choice and matching, with the remaining 25 percent essay type questions. Questions will be derived from the current and previous levels of qualification.

b. An oral board will be a formal question-and-answer format. A practical examination will consist of a question and answer sessions with individual board members as well as in-plant demonstrations of plant knowledge. All questions will be derived from the current level of qualification advancement and below. The candidate should answer all questions to the best of his/her ability. Each board member will grade the candidate based on the examinee’s response to the question. If the board member is unsure or unclear of the question or answer, no grade shall be given. The grading scale will be 0 to 10 with 10 being excellent. A score below 8 will be rated as “C” (further study condition) and a score below 7 will be rated as “M” (mandatory further study), follow-up checkout by a board member is required.
An Oral Board or Final Watch Standing Review Worksheet (Attachment A) will be provided to record and grade each question. All questions will be grouped into three (3) categories; Theory & Systems, Casualty Control, and General. Theory & Systems will include questions pertaining to plant operating systems and theory of operation. This category will account for 45 percent of the overall score at the UO I & UO II levels, and 30 percent of the overall score at the UO III – LUO levels. Casualty Control will include questions pertaining to casualties and/or abnormal conditions. This category will account for 45 percent of the overall score at the UO I & UO II levels, and 60 percent of the overall score at the UO III – LUO levels. General will include questions which have minimal impact on final score computation. This category will account for 10 percent of the overall score.

At the conclusion of the oral board, the board members will compile individual scores and a composite score will be an average of each member’s scores. The following scale will be used to determine the board results:

<table>
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<th>Board Composite Score</th>
<th>Conditions</th>
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<tbody>
<tr>
<td>Equal or greater than</td>
<td>8</td>
</tr>
<tr>
<td>From 7 - 7.9</td>
<td>Pass with conditions</td>
</tr>
<tr>
<td>Less than 7</td>
<td>Fail</td>
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Two (2) mandatory (M’s), or a total of five (5) combined look-ups (total of conditional + mandatory) as agreed upon by the entire board is automatic failure.

Candidates who pass with conditions will be required to complete additional training and be certified by a board member before advancement is approved. This may include one-on-one training, re-board, or a mini-board with supervisors. Failure to complete the board’s requirements for advancement within 30 days will require the employee to re-board. The first board will be considered a failed board, and the second board will be scheduled as soon as possible, not to exceed 30 days, by the Training Coordinator.

Individuals who fail the oral board will be required to re-board within 30 days. Failure to re-board within 30 days, or failing a second board failure, the employee will be referred to a Level III board per paragraph 1.e.(3) of this OD/SOP. Individuals who pass a second board will receive a minimum passing score of 7.

The Training Coordinator will forward to the candidate and supervisors, within three (3) working days, a worksheet detailing the results of the board, the composite score, and the area(s) required for improvement and development.

c. A Final Watch Standing Review (Attachment B) is an alternative to be offered for an Oral Board should the candidate for advancement choose. The Final Watch Standing Review is a formal practical examination of an individual’s knowledge, which is the same function of an Oral Board; instead it is to be conducted in the operational spaces of the utility plant normally lasting no more than 12 hours total in a 7 day shift rotation watch.

5. Exceptions / Appeal

Any exceptions to the requirements to this OD/SOP must be approved by the Director of Utilities. The decision of the Director of Utilities is considered final.

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Scores received on the written test and the oral board’s decision is considered binding. However, an employee may appeal as set forth in the following:

a. An individual experiencing difficulty with the test may request an oral exam. An oral or written request must be submitted with specific justification for the appeal. The request will be routed via the Training Coordinator through the Superintendent to the Director of Utilities. Upon approval, an oral exam will be scheduled. All oral questions will be taken from a written advancement examination for the current level of qualification and below.

b. The following may apply for an individual who has failed an oral board:

(1) If a Level I board was failed, the individual may reschedule the board as described in section 4 part b above, or request a Level II board. If the individual fails the Level II board, this will be considered a second board failure and the individual will be referred to a Level III board per paragraph 1.d. (3) of this OD/SOP.

(2) If a Level II board was failed, the individual may re-board as described in section 4 part b above, or may request a Level III board.

(3) To request a Level III board, a formal request will be routed via the Training Coordinator through the Superintendent to the Director of Utilities. It must include an explanation of why a Level III board is requested, any other pertinent information the individual feels necessary, and specifically set forth what issue the board is expected to rule on. The findings of this board will be binding.

To support their position, the individual requesting the Level III board may introduce or present anything or anyone on his/her behalf. The board members should consider the long- and short-term needs and effects this may have on the department and individual(s).

While results of a Level III board are not binding on the University, the board’s recommendation shall be considered.

c. Employees may appeal decisions pertaining to compliance with this OD/SOP at any time in accordance with TTU OP 70.10 – Non-faculty Employee Complaint Procedures.

6. Special Circumstances

a. An employee is required to advance to the pay grade of UO II prior to being designated and assigned as a Lead Operator.

(1) Needs of the department may necessitate assignment of a UO I to this responsibility.

(2) If this individual is current in the PQS program, this will warrant a temporary (for pay purposes only) promotion to UO II. This will remain until the individual completes all requirements for advancement to UO II or is relieved of the responsibilities of Lead Operator.
(3) Individuals will require specific approval by the Director of Utilities prior to this assignment.

(4) If an individual is appointed as Lead Operator and is not current or in the PQS program, no pay increase will be granted until PQS progress is brought current for two (2) consecutive monthly point counts.

(5) Individuals who become delinquent while on temporary assignment as Lead Operator will have until the next point count to become current in PQS. Failure to become current may result in disciplinary action including removal from Lead Operator status and reduction of pay.

b. Occasionally, the department hires an individual who demonstrates prior knowledge and experience at an elevated pay grade (i.e., UO I, II, etc.). This prior knowledge may be determined by testing or by past work history.

(1) Employees in this category may be required to start the PQS program at a level junior to the level to which they were hired and complete all other qualification levels up to their current pay grade without any PQS based pay increase.

(2) Employees who meet this criterion may be hired in a “Trainee Status”, and will be given an allotted time to complete PQS qualification up to their hiring level. This allotted time should not normally exceed 12 months per TTU OP 70.14.

(3) Employees who fail to qualify in their allotted time may be subject to disciplinary action up to and including dismissal, for example, an individual may be hired as a “UO II Trainee” and be given six (6) months to complete qualification up to UO II. Failure to complete qualification in the allotted time could lead to disciplinary action up to and including dismissal.

c. Employees hired on a temporary basis who express an interest in pursuing PQS may do so through the following instructions:

(1) The temporary employee must be employed for thirty (30) working days with a satisfactory job performance and attendance record before they can be enrolled in the PQS system.

(2) A written request to be enrolled in the PQS program must be submitted by the temporary employee. The temporary employee’s immediate supervisor and superintendent must sign an agreement before the temporary employee can be enrolled.

(3) The temporary employee must be actively pursuing permanent employment in the Section of Utilities with a formal application on file. The applicant should also be made aware of the depth of the PQS program and have a full understanding of this OD/SOP. Additionally, if assigned to the PQS system, the temporary employee may not let PQS interfere with the short term project they were originally hired to complete.

(4) The temporary employee’s progress will start from the issue date of the PQS book in accordance with this OD/SOP and all of the rules and training schedules will also apply from this date. If the temporary employee secures permanent employment with the Section of Utilities, their PQS start date, current and required progress levels, and completion dates will not change from those assigned with the original issue of the PQS.
book.

(5) Temporary employees may attend weekly training once they have been approved to enroll in the PQS program.

(6) If the temporary employee is unable to secure permanent employment in the Section of Utilities, they must return all training materials.

7. Disciplinary Action

Discipline will be conducted in accordance with TTUOP 70.31. Employee Conduct, Discipline, and Terminations, failure to maintain the required PQS advancement pace is an example of poor job performance and will result in disciplinary action up to and including dismissal. All employees subject to this standard operating procedure are required to advance to UO II. Likewise, all plant operators in the PQS program are required to maintain minimum qualifications for their current pay grade. Each month the Training Coordinator will evaluate the PQS progress of all employees and distribute to the Director of Utilities, and supervisors, a Personnel Training Status Report. This report will include the training progress of all personnel active in PQS who:

a. Failed to remain current in their current PQS book at all times (below (0) zero days ahead).

b. Are delinquent in requalification.

c. Fail to qualify the next level of advancement within eighteen (18) months of beginning that level of qualification.

Since operator qualifications are an essential core necessity and poor performance in PQS directly relates to unsatisfactory job performance, supervisors will act in accordance with TTUOP 70.31. Employee Conduct, Discipline, and Terminations.

The designated supervisor will issue all oral and written disciplinary actions, with another supervisor in attendance.

The Director of Utilities may, based upon mitigating circumstances, decide if any disciplinary action is required, and / or the extent of the disciplinary actions to be administered.

**Disciplinary actions pertaining to compliance of this OD/SOP will not carry over to the next level of qualification**
8. Employee at Will

Refer to Texas Tech University OP 70.31 Section 2.
Employment at Texas Tech is governed by the employment at will doctrine. Employment is for an indefinite duration and can be terminated at any time, with or without cause and with or without notice, by either Texas Tech or the employee. Nothing in this or any other Texas Tech operating policy and procedure constitutes an employment agreement, either expressed or implied, a contract, a contractual relationship, a guarantee of continued employment, or a property right. No one can execute a contract of employment except the Board of Regents acting as a whole, the chancellor, or the president of the university and any such contract must be within their legal authority and must be in writing.

9. Right to Change Standard Operating Procedure

Operations Division, Utilities reserves the rights to interpret, change, modify, amend, or rescind this procedure, in whole or in part, at any time without the consent of employees.

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Reviewer: Dale Townsley

Approved: schilder

Assistant Vice President – Operations Division