



***Preparation for the Calpine PAUT Performance
Demonstration Qualification Exam.
Dec 2019 Rev(0)***

First: Company X contacts Calpine (Ken Mecom) to express that they want to do PAUT work for Calpine. Calpine will send Company X a copy of the Calpine Specification for PAUT Inspection Tech Spec 15161. Kenneth.Mecom@calpine.com

Second: Company X sends their PAUT Procedure to Hellier NDT (the Calpine approved Exam Organization) 600 Kenrick Suite C-1 Houston TX 77060 attention Don Locke, for review in comparison to the Calpine Specification. dlocke@hellierndt.com (cost \$560.00 payable to Hellier by CC or approved P.O. by company X)

Third: Company X schedules (888-282-3887) a time to qualify the approved PAUT procedure at Hellier on select pipe samples. (cost \$560.00 payable to Hellier by CC or approved P.O. by company X)

Fourth: Company X plans for UT techs to take the 2-day Performance Demonstration Exam at Hellier Houston. This practical performance exam must be completed in the allotted time, 2, 8-hour days. (cost \$2000.00 payable to Hellier by CC or approved P.O. by company X) Any re-examination is charged at the same price. This is not training, some come prepared as you would for the job.

NOTE: It is critical that candidates for these performance demonstration exams come 100% prepared with a proven qualified procedure. The candidates will show their scan plan for each pipe and the heavy wall sample and then complete the exam. The candidate's success or failure will be shared with Calpine only. The candidates can expect exam results communicated to the company setting up the exam in a matter of days.

NOTE: If the candidates have previously qualified on a CALPINE PAUT qualification exam, they must contact CALPINE to determine if they must re-qualify under this new 2019 program.

NOTE: 100% of the flaws over .250 in length must be identified and sized per the exam protocol. The UT technicians can use all the resources they would normally use just as they would in the real field testing of parts. The use of Manual contact UT, Sear wave, PAUT (manual, semiautomated or automated) and TOFD are approved resources. All other resources shall be pre-approved by the examiner before the exam begins. All data collection and analysis must be exclusive to the examinee. There will be no coaching or

mentoring from the approved examiner. Flaws like laminations and transverse cracks must be identified even if the length cannot be determined.

What to expect at the test site?

1. An approved examiner will meet you at 8:00 A.M. to brief you on SAFETY, the exam and reporting process.
2. You are required bring all UTPA equipment with you to the exam. Once the examiner has approved the equipment and resources, the examiner shall assign a pipe sample set to be tested to you. You will be required to follow your company's procedure, collect the PAUT / TOFD data on all welds and document all results on the data sheets provided. **"NO SPECIMEN DATA WILL BE SAVED ON THE COMPANY PAUT EQUIPMENT"**.
3. **How will the technician be graded?** Technician performance will be evaluated in the following categories and any indication over 20% amplitude should be evaluated, documenting any flaw >.250" in length:
 - A. **Detection** - The detection portion of the test is applied to initially evaluate the technician's data report. If the technician does not detect some specific flaws, no further evaluation is required. The technician must detect **100% of all types of flaws in the test set**. Sufficient data must be provided in order for the approved examiner to determine if the candidate actually detected the flaw.
 - B. **Flaw Length Sizing** - The flaw length shall be sized in accordance with the Test technician's UT Procedure. Successful performance for flaw length sizing is defined as the resultant flaw size as being equal to or greater than the actual flaw length size. Over sizing of the flaw length may result in false calls in the adjoining grading unit. The technician must correctly length size approximately **100% of the detected flaws with .250 tolerance**.
 - C. **Flaw Positioning** - Reported flaws must also be positioned correctly with respect to the weld centerline (upstream/downstream). Evaluations will include the flaws approximate relationship to the weld centerline. Cross sectional plotting of flaw indications on the indication data sheets may be required in order to determine the location of the flaw. The candidate must correctly position approximately **100% of the detected flaws, with a .500 tolerance**.
 - D. **False Call** - A false call is defined as reporting a flaw within a non-flawed grading unit. Candidates will not know the location of unflawed grading units. The candidate must correctly evaluate the unflawed Grading Units and have **ZERO False Calls** in order to be successful.

Unsatisfactory performance in any category will result in test failure.

You should show up to this exam just as you would to the job site with your own couplant and anything you need for your own couplant supply for automated systems. Water will be available at the test site.

Applicants can expect some necessary calibration blocks / standards to be provided but each person should bring any calibration / reference blocks specific to their company procedure.

No cell phones can be used during test except in case of an emergency. There will be a break for lunch.

If you have added questions, contact Ken Mecom at Calpine or Don Locke at Hellier.