

ATMOS MID-TEX MIC SKILLS ASSESSMENT AND PROMOTION PROCESS

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Background:

Atmos Energy represents an accurate picture of the changing state of the natural gas market. In an ever changing market, consolidation of both pipeline facilities and distribution facilities has brought a new set of opportunities and challenges that Atmos has addressed.

One of the most significant challenges is the aging of the knowledgeable and valuable workforce that provides maintenance operations in an ever cost-conscious industry. The *Oil & Gas Journal* recently stated the following: *Today the energy industry is facing one of its greatest challenges - an aging workforce and not enough qualified people to step in and learn their jobs. Although the inability to hire and retain skilled and educated employees afflicts other industries as well, the problem is particularly acute in the oil and gas business, especially among geologists, geophysicists, petroleum engineers, and landmen - professionals who traditionally have formed the backbone of petroleum exploration and production. The energy industry is being hit particularly hard by this "graying of the workforce."*

By the end of 2010, over 50% of the existing workforce will be retiring, and with them valuable skills, knowledge and industry information that cannot be easily attained outside of Atmos Energy or training schools.

Atmos Energy's Mid-Tex Operations group has taken a significant step toward adjusting their existing workforce to get ready for this work-shortage challenge for 2010 and beyond. The implementation of the Skills Assessment and Promotion Process over the last two years was cutting edge in the implementation of a program to address their needs and requirements.

In 2003, prior to Atmos' acquisition of TXU Gas, TXU reorganized their gas businesses by merging the pipeline operations and gas distribution operations into one business unit. This major reorganization offered an opportunity to address the following issues:

1. Develop technicians to become competent in numerous skills specific to the gas industry.

Increasing labor and transportation costs impose an increasing need to organize a workforce to effectively respond to both routine and reactive operational issues. This need creates an expectation that technicians be adequately trained in many skills. The hiring pool for technicians skilled in the gas services industry is limited (We don't hear grade school children dream of becoming a gas service technician.) Hence, in order for Atmos and owner/operators of gas companies to safely and competitively operate their gas systems, they will need to develop their technicians to become competent in numerous skills specific to the gas industry. It is no longer practical for technicians to specialize in a short list of skill sets due to the integration of technologies and the increasing demand to maintain competitive O&M costs. The old methods of developing newer technicians by "riding along" with more experienced technicians for several months is not an option in today's

market and many of the skills require more than OJT to become adequately competent. The complexity of today's electronic technology compared to the more simplistic, mechanically driven equipment employed twenty or thirty years ago leads to a need of the owner/operators changing their approach in developing the skills of their technicians. The owner/operators need to manage performance with regard to an expectation that technicians continue to demonstrate self discipline to develop with the pace of technological development to stay competitive in the industry and meet the needs of their customers. Furthermore, the Owner/Operator needs to be creative toward developing, attracting and retaining the best technical talent.

2. **Reduce the level of technicians.** Prior to merging the pipeline and distribution operations, there were numerous job classifications assigned to measurement, instrumentation and pressure control operations. The reorganization of the business units included merging all the measurement, instrumentation and control operations into one work group and one job hierarchy. This provided an excellent opportunity for assessing skills and defining those skills and enabling a promotion process.
3. **Define skill sets and provide opportunities for training of those skills sets across the company organization.** Operations personnel found themselves "slotted" into the measurement, instrumentation and control work group primarily based on their work experience in measurement or pressure control on either the pipeline or distribution assets. The technicians came to depend on teaching and learning from each other. However, geographic work assignments to foster the sharing of knowledge were not always favorable for expediting personal development in a timely fashion. Also, there was no clearly defined promotion path for existing operations personnel who wanted to improve or enhance their skill set.
4. **Define and provide a fair and accurate skills assessment program that all operations personnel could participate in.** In the past, conformity of skill sets was not "common" due to the varying level of skills across operations groups. Some of the primary, rudimentary devices used to measure gas flow volumes and regulate system pressures have not changed significantly in the last century. The design principles of pressure regulators, control valves, diaphragm and orifice meters are essentially the same as they were many years ago. However, new methodologies to measure gas, monitor pressures and gas flow volumes, collect and record flow data, report maintenance and operational activities to comply with increasing financial requirements, customer expectations and operational safety regulations has changed significantly and will, with no doubt continue to change at an even more rapid pace. Too, the diversity of various technologies, brands, makes and models has grown tremendously. Subsequently, the employees that operate and maintain gas system equipment need to become technically competent in a vast quandary of skills

Process:

Atmos created a task force of high-level, highly skilled operations personnel and third-party expert consultant (Rick Feldman Associates) to begin development of the process.

Step One: The first step is to recognize which technical skills are needed to effectively operate and maintain the systems and equipment in the field.

Atmos' Mid-Tex division had previously performed a series of field pipeline meter audits which included an informal assessment of the some technicians performing their routine meter testing and calibration. During this audit many strengths and opportunities were recognized for the technicians. Subsequently, a task force team of Atmos' Mid-Tex personnel and third-party consultant was put together to develop a formal skill assessment process to assess the skills of each technician maintaining meter stations. The team was made up from staff of various work groups including Gas Measurement Services and the Operations Measurement, Instrumentation and Control (MIC) group. Rick Feldman and Associates was brought in based on the consultant's experience in past projects with Atmos in regards to LUAF (Lost and

Unaccounted For.) Amos's Mid-Tex Division Operations is organized such that the MIC group is charged with the O&M of the pressure control, flow control, odorization and communication equipment along with the measurement equipment for both the pipeline and distribution systems in the Mid-Tex Division. The Skill Assessment team included primarily well experienced MIC Technicians. The technicians on the team were recognized to have both diverse and specialized technical knowledge and experience in gas measurements, instrumentation pressure control. In addition, representation from Human Resources was included throughout the process development.

The scope of the project developed by the task force was to develop a Skill Assessment process exclusively for the MIC group. Other operations work groups such as Construction & Maintenance, Survey & Corrosion and Customer Service were not included in the project scope. Atmos Mid-Tex recognized the MIC Skill Assessment Project as a pilot project. Skills assessment processes for other job hierarchies would be considered at a later time.

The scope of the project included a goal to enable the MIC Supervisors to evaluate and rate the skills of their direct reports and subsequently rank them in three tiered job grades. The scope included the expectation that the process details were developed, the process was approved by the Business Unit management and the process was employed to make it timely with an annual corporate salary action and promotion calendar. The project included the team lead providing biweekly updates to management and human resources to ensure the developments were on course and the project was completed within three months to meet annual salary action dates.

The Skill Assessment team commenced the development of the process in executing the following tasks:

1. Identifying all the tasks that the MIC group may be accountable for. The Operations group had previously developed a responsibility matrix to document the primary accountabilities for all O&M activities.
2. Each task was documented in greater detail and defined in one to three levels of competencies primarily based on the complexity of the specific tasks. Some tasks were obviously less complex, thus were recognized to require only a basic knowledge. Other tasks were more complex. The more complex tasks were detailed and defined to three skill levels, including:
 - Level 1: A "basic knowledge" level of skill
 - Level 2: A level of skill defining the ability to perform repairs on the equipment
 - Level 3: An expert level of skill to include the ability to troubleshoot equipment problems and issues
3. Initially, it was proposed to prioritize the list of skills identified, but this concept was abandoned due to issues of bias and complexity. It seemed to be natural for the technicians to recognize the skill in which they were most competent to be the greatest priority and most complex therefore deserving the greatest weighting. Also, it became too complex to derive a method to rate importance and complexity of all the skills sets.
4. The task force next derived a clear, defensible methodology to correlate the total skill assessment ratings with the three job grades. A total rating adding up to 90% of the total possible rating was deemed the threshold for the most senior level position (MIC Technician Specialist). A total rating adding up to 70% of the total rating possible was the threshold for the next level position (MIC Technician II). Technicians whose skills were assessed below a 70% were slotted as Level I Technicians. Formal job descriptions were reviewed to ensure consistency of communications of performance and job knowledge expectations for each of the three positions.

Step Two: The next step is to assess the skills of the workforce.

Implementation of the process was initiated by the MIC Supervisors rating their direct reports based on firsthand knowledge of the technicians' skills. Subsequently, all assessments were reviewed by a panel in each operating region to enhance consistency in rating methodologies.

The MIC Supervisors reviewed the Skill Assessments with each direct report. The process included opportunities for the technician to demonstrate a higher level of competency for any of the identified skills by an oral test, written test or hands on demonstration.

A subsequent process to promote to the next Technician level was implemented. The process for a technician to work toward promotion is to seek training and work experience and then make a request with their supervisor to demonstrate their skills. The skills demonstrations are defined O&M activities on the relevant equipment to be performed either on the job site or at the Business Unit's Technical Training Center. When the technician has demonstrated enough skills to raise his overall rating to either the 70% or 90% of the total possible rating, the technician will take a written test that includes technical questions relative to the MIC work. If the technician passes the exam, his supervisor makes a formal request for the technician to be promoted to the next job grade.

Ongoing Challenges:

From the inception, it was recognized that the Skill Assessment would require periodic updating to keep in line with new technology. Also, some technology will become obsolete and irrelevant to the MIC group's responsibilities. The Skill Assessment was revised soon after one year of the original implementation. The revisions were developed by an ad hoc team of managers of internal customers to which MIC provides services (Gas Measurements, Gas Control, Pressure Control, and Regulatory) along with MIC Supervisors. The revision defined some skill sets in more detail, and some skill sets were merged to better reflect the current workloads of the MIC staff. The revised Skill Assessment included a change for the threshold to Level II technician from 70% to 50% by recognizing technicians that can demonstrate to be competent in half of the many skills identified should be valued in the next job grade. Atmos believes that that the Skills Assessment Process is a living process that continues to grow and enhances as technology, industry drivers and customer needs change.

The reorganization, the combination of the two operating groups and the implementation of the Skills Assessment program has been a positive experience for the managers by allowing them to identify and slot each technician in a Skills Level, and then continue to encourage their technicians to focus their training for promotion in areas and skills that are needed by the area group. For the technicians, the program has been challenging, and it has required the technicians to recognize that Atmos is looking forward to providing a talented work force for 2010 and 2020.

The ability to address internal job equities must also be an ongoing consideration. This can become significantly complex with compressed pay ranges. Technicians that have demonstrated to be contemporary in many technical skills should be recognized to have greater salary potential than peer employees in less technical job hierarchies. Obviously employees have their own bias for their own job hierarchies. The C&M technicians repairing leaks in extreme weather conditions may consider themselves more valuable than the MIC technician "riding around in an air-conditioned pickup" vs. the skilled MIC technicians considering themselves more valuable than the C&M technician operating a hand held shovel or jack hammer. Developing formal Skills Assessment processes for all departmental job hierarchies may mitigate employees' perception of misaligned job grades. The absence of developing formal Skills Assessment processes for all departmental job hierarchies can cause those that have their skills formally assessed to feel unfairly singled out and distract attention to the benefits of the process.

The value of the technicians with less diverse and more specialized job experiences and job assignments must be appropriately recognized. If a Business Unit is staffed to have some technicians focus on significant, specialized tasks that are clearly important to the Company, the Skill Assessment process should appropriately recognize the value of the more specialized technicians. For instance, the quantity of positive meters along with the cost and size of test equipment and specific skills employed to test, calibrate and maintain positive meters is significant enough to have technicians assigned to this type of work full time. Too, the equipment, tools and spare parts to maintain positive meters leaves little spare cargo space in the service vehicle for tools and parts to service other type of equipment. Considering this with meter to meter travel time the technicians assigned to operate and maintain positive meters have limited opportunity to operate and maintain other types of measurement, instrumentation and control equipment yet their contribution is valued.

As managers and supervisors have often experienced with performance reviews, maintaining consistency among all the supervisors when formally assessing skills must be managed. It is important that the technicians' line management provide collective leadership toward the process. Furthermore, the most senior managers in the Business Units should demonstrate appropriate leadership by having a clear presence when the process is implemented, being available to answer questions from both the technicians and supervisors and reaffirming the business case and benefits of the process. Internal Technical Support and Human Resources groups can help lead the development of the process but ultimately, the process should be rolled out and implemented via the respective management hierarchy.

Conclusion:

Overall, Atmos considered the project a great success. It is obviously clear that the process must be considerate and respectful to the employees who demonstrate significant diversity of technical skills and those employees who demonstrate more specialized expertise. It is important the process further encourages Atmos employees to demonstrate their abilities, by allowing them through self-motivation to come forward. The desire for Atmos is that each Technician can continue to increase their skills.

It is important that Atmos management continue to explain the benefits of performance review processes. By understanding the benefits from the Skill Assessment process, Atmos and the Technician as a "team" can capture and elaborate on the skills the technician brings to the table and focus on specific opportunities that may lead to encouraging the employee's development toward becoming more "valued." Also, the process can be used to help promote the job descriptions which may be used with market surveys for developing pay grades.

In summary, it is clear Owners/Operators will need to become creative and direct to retain, develop and attract good, solid technical talent to competitively and safely operate and maintain natural gas measurement, instrumentation and control equipment. Furthermore, it is clear that technicians themselves will need to develop an understanding that employers' performance expectations of technical staff includes the ability to continuously learn about new types of equipment and evolving technologies. A skill assessment process that relates to the Business Unit's services can provide detailed documentation of strengths and opportunities for both the Company and the individual employees as well as provide a foundation for specific training needs.