NOC Process Technology Advisory Committee Meeting Minutes September 30, 2016

The Process Technology Advisory Committee meeting was held at the Renfro Center on the NOC Campus in Tonkawa, Oklahoma, at 12:00 noon. Board members present were Jim Hendrix, OMPA; Diane Anderson, Phillips 66; Eric Worthen, OMPA; Liz Pershing, Ponca Works; Terry Thurber, FRI; and Brian Lane, Oklahoma Manufacturing Alliance. NOC members present were Dr. Cheryl Evans, Dr. Pam Stinson, Tricia Moore, Dr. Rae Ann Kruse, and Dr. Frankie Wood-Black. Scott Haywood attended as a guest.

Lunch was served and Dr. Evans welcomed the committee and gave an update on activities at NOC. Dr. Evans shared that NOC has received three national recognitions. For retention and completion rates, NOC has been recognized three times in round one of the Aspen Institute awards, and we have also been recognized recently by both SmartAssets and WalletHub for cost of attendance and return on investment. NOC is working to keep tuition affordable even though 16% was cut from the state budget this year. NOC lost \$1.6 million this year and \$1.3 million last year. NOC is changing what we do when it comes to operating expenses, travel, and salaries. NOC has incredible employees with a "can do" attitude.

Tricia Moore, the Agriculture, Science, and Engineering department chair, introduced the NOC staff. The Advisory Board members introduced themselves. Mrs. Moore provided a program overview:

- Frankie Wood-Black just got back from the NAPTA conference and believes an endorsement by NAPTA would make graduates more competitive
- Grant equipment has been installed
- PTEC instructors will receive training on the simulator October 4, 2016
- Equipment is housed at Agriculture facilities east of campus. Pad was installed five years ago, lights have been placed, and we can now use the area for night classes.

Mrs. Moore also provided a scholarship overview:

- Joyce Haywood scholarship is new this year. PTEC is very fortunate to have the ability to market the program to women.
- Phillips 66 monies are designated for program and student support.
- Berglund science and math endowment was the largest donation in the Foundation's history. We are waiting on State to release matching funds for endowed chair.
- Koch scholarships provide incredible student support.

Dr. Frankie Wood-Black announced the program had 44 applicants for 24 spots this year. Classes are limited by space and simulation availability. The program dipped into the alternate list because a few of the top 24 applicants declined admittance into the program. We already have 13 applications for Fall 2017 class. The application deadline is March 15, 2017. Dr. Wood-Black is expecting 50-60 applications by March. Spring

graduates didn't fare well in the job market because many didn't have five years of work experience. Diane Anderson said Phillips 66 no longer hires high school graduates. Employees must have at least an associate's degree. Jim Hendrix agreed that to become an operator at a power plant, you must have more than a high school diploma. Phillips 66 just hired two instrument technicians from the OSU-IT program.

Dr. Wood-Black requested input from the committee on offering introductory courses online. She believes it may help direct students into the proper career path. The PTEC students rotate through their coursework as a group. When a student drops out it limits the class size. The first year of the application process, we lost about 6 of the 24 student cohort. Four were lost to good jobs and two were lost because it wasn't a good fit. Going into this year, we had many of the same concerns. We award scholarships during the second semester so we don't give scholarships to people who don't stay with the program.

At the end of Spring 2017, Stan Long will retire. Stan has taught Safety for a long time. We will be interviewing new candidates next week. We hope to bring the Safety course online for Fall 2017.

The program instructors followed the committee's advice in the spring to have students take Algebra rather than Technical Math so PTEC advisors are directing more students into Algebra. More students are ending up with an Associate's Degree in PTEC. Dr. Wood-Black spoke to Vincent Cain at Phillips 66 and he recommended our capstone class to provide some kind of consistency.

Question 1: What are your thoughts about having an endorsed program?

Dr. Wood-Black recapped her recent attendance at the NAPTA conference and what it takes for a program endorsement. Frankie said the program meets many of the requirements except for a few things:

- Three advisory committee meetings per year
- Paperwork associated with the advisory committee
- Paperwork for safety auditing, i.e. copies of all exams, samples of student work

The PTEC faculty are going to start collecting paperwork and student artifacts, but she's not too concerned with meeting required standards. Probably looking at 2019 before an external audit to avoid conflicts with Higher Learning Commission (HLC) school wide review. A question and answer discussion followed.

Diane Anderson asked, "What are the advantages of being an endorsed program?" Dr. Wood-Black said, "The endorsement makes our program more competitive and puts our students' skill set equivalent with Gulf coast programs."

Diane Anderson asked, "What is the cost?"

Dr. Wood-Black answered, "Nothing. We are a member of the organization and it is basically a third party who comes in and does the assessment."

Diane Anderson said, "I think you should pursue as long as the advisory committee is ready to give up another day."

Dr. Wood-Black said, "We need good participation but the participation needs to check all the required boxes on the assessment instrument."

Diane Anderson said, "This sounds like a win/win, especially for those students who go to the Gulf area in search of jobs."

Dr. Evans asked, "What is the cost of the assessment?"

Dr. Wood-Black responded, "The organization that performs the audit is half industry and half academic so there is no additional cost of the assessment."

Tricia Moore asked, "If we have three meetings per year, what do those meetings need to look like?"

Dr. Wood-Black answered, "We need a charter document and an active committee."

Dr. Evans asked, "Could a site visit be considered a meeting?"

Dr. Wood-Black responded, "Yes, we could hold meetings at different facilities."

Terry Thurber said, "F.R.I. runs on a charter and we have similar requirements. We are able to meet via simulcast."

Dr. Wood-Black said, "Right now we are doubling up on activities by conducting mock job interviews and job fairs on the same day as advisory committees. It was reported that many PTEC programs lose students because of fear of heights who can't climb a tower or have issues with tight spaces, like a bunker control room or inside of a dam." Dr. Evans said, "We could have a field trip as part of the intro class and fulfill a meeting requirement."

Terry Thurber said, "When I was in Chemical Engineering at OSU, we had to flip flop a class. Climbing a tower was part of a senior-level class and is now conducted during freshman year. Towers that sway are even worse. We can do height checks at F.R.I. Students could ride down in a chair."

Dr. Stinson said, "I've heard the same issues in wind power classes."

Dr. Wood-Black said, "We want to make sure we climb towers earlier in the program." Jim Hendrix said, "Our issue is that old timers tell the new guys that the equipment is old and dangerous and have some of the guys really scared. I explain that if you are scared, this isn't the place to be working."

Eric Worthen said, "There are dangerous chemicals at all plants."

Jim Hendrix said, "We tell workers there is no guarantee that stuff won't happen. They have to respect the damage it can do to you."

Dr. Wood-Black said, "All of these topics are going to be covered next week in our boilers class. We teach the students to look at the Material Safety Data Sheets of the chemicals they will be handling."

Question 2: What continuing education should be available for individuals who are working in the processing industry? How do you envision these looking? Would it help to make modules available? At NOC or online for continuing education for your folks? Just-in-time training?

- OMPA uses a program called GPI Basics 101. We give raises as an incentive for our employees to complete—anywhere from .54 to \$2.16 an hour. There is a proctored quiz. We pay a fee to GPI every year so we could look at what you are suggesting. One employee hasn't passed a quiz in 8 years. Another passed them all in three months.
- Phillips 66 said "Yes, that would be great."
- F.R.I. thought it was a great idea.

Question 3: Are there any new skills sets that are needed? For example, should we teach a circuit class? Should we bring back the pipeline class?

- OMPA said it wouldn't be necessary in a power plant.
- Phillips 66 asked if pipeline was covered in another class and Frankie replied there were pieces in other classes. This class would be more into slugs, pig operation, more into the plant side, corrosion coupon, and introduce galvanization.
- F.R.I. said that chicken people use the same board process. A pipeline class could carry over into that.
- Tricia Moore said operating a big farm isn't too far from that.
- Phillips 66 commented that people who have those jobs stay a long time so there isn't much turnover.
- Frankie reminded the group this could just be a class, not a degree program.
 Might be necessary since some of the pipelines are getting older.
- Dr. Evans added that her brother is a pipeline manager and she would reach out to him for input.
- Frankie commented that some graduates might come back to take this course.

Diane Anderson made a motion that the advisory committee change meeting status from 2 times per year to 3 times per year. Liz Pershing seconded the motion. The motion passed unanimously.

Tricia Moore thanked the group for their participation and the meeting was adjourned at 1:20 p.m.