#### Minutes

## **HVAC Advisory Board**

### November 2, 2023 – TTC 5740

- 1. Welcome and Introductions 11:04 a.m.
- 2. Members present: Robert Terry Anderson, Dwight Coblentz, Jason Garza, Jerry Lentz, Diane Long, Gabriel Maldonado, Jim Penny, Kyle Rogers, Josh Smith, Rob Vander Weele, Luke Vanderhill, Dan Wood, Shaun Wright
- 3. Call to approve minutes from last meeting: Minutes of March 3, 2023 approved. Motioned by: Luke Vanderhill Seconded: Kyle Rogers
- 4. Program updates
  - a. Instructors for the HVAC Department
    - i. New full-time instructor, Jason Garza: currently teaching Core Level 1 courses. Winter 2024: Core Level 2 courses, One of the two EPA courses, along with Customer Relations
    - ii. Two part-time instructors: Evan Gross (sheet metal), Jim Kelly, Winter 2024: Systems Design & Manual D
  - b. Discuss HVAC courses & EFE
    - i. New KRESA EFE Tech Center under construction, anticipated opening in Fall 2024
    - ii. EFE enrollment is above average this year, but will likely be down next year upon the completion of the new Tech Center
  - c. Enrollment for HVAC
    - i. Class size for students in their 3<sup>rd</sup> of 4 semesters is 12-13
    - ii. Retention have allowed seats above capacity (18) in Level 1 courses to improve retention rate for Level 2 and graduating level courses
      - 1. Large factor is students gaining employment after Level 1 courses and not continuing to graduation
      - 2. While the goal is to get students jobs, the low retention is not seen as a success in college statistics
  - d. Discussion on finding new employees
    - i. Industry partners agree it's tough to find qualified candidates
      - 1. Not a lot of students entering the trade May 2023 had around 16 graduates
- 5. New business and/or projects
  - a. Discuss new and emerging trends in the industry
    - i. Future discussion needed around R-32 and R-454B in regards to EPA phase-down of refrigerant R-410a

- ii. Switching from brazing to pro-press fittings to simplify
  - 1. Industry partners say around 50% of installations are using pro-press fittings instead of brazing. It was noted that there are no refrigerant leak concerns. Saves quite a bit of time, especially when dealing with hydronic systems. Higher upfront cost but fewer call backs with proper installation
- b. Students use of computer technology/software & soft skills
  - i. Push for more computer and internet use in the HVAC industry
  - ii. Use of Visio utilized by several classes on the graduating level, students need to learn how to use the software and apply it to various course projects
  - iii. Soft skills try to emphasize the importance of customer service in every class
    - 1. Some students have great technical skill but poor soft skills
    - 2. Industry partners agree about teaching the importance of soft skills. Most companies provide training to their employees, as each one has their own policy regarding customer relations
    - 3. The average customer is more informed these days students need to learn how to answer questions confidently
- c. Capital requests for Hydronics was approved
  - i. Currently installing a Navien boiler and two Burnham boilers
    - 1. The current process for parts ordering needs improvement
- d. 2023 Capital approved/received (testing instruments etc.)
  - i. Received many testing instruments, including: refrigerant leak detectors, digital manometers, micron gauges, wet bulb/dry bulb tester, mega ohm-meter
- e. Field trips
  - i. HVAC 210 (Controls) class to visit AbsolutAire for training on make-up air units
  - ii. HVAC 215 (Hydronics) class to complete a lab in the KVCC boiler room
  - iii. Many field trips go to places that want to hire students
  - iv. Would like to visit the WMed Innovation Center in the future to see the new Lochinvar boilers.
- 6. Updates from around the college
  - a. Possible expansion of the tech wing
    - i. The state turned down the college's expansion request. Most funding went to colleges on the east side of the state.
- 7. Open discussion
  - a. Oil furnaces
    - i. Currently 8 oil furnaces in the HVAC lab
      - 1. Industry partners recommended reducing to 4 units. Oil furnaces in Kalamazoo County have become less popular

- 2. Country-wide push for electrification and cleaner combustion for fossil fuels
- ii. Cutting back on the number of oil furnaces in the lab could make room for other technology like heat pump systems or mini split ACs
- iii. One 2-credit class in the certificate program is Oil Burners
  - 1. Consider changing to an elective course

### b. Steam/Sheet Metal

- i. Steam is an elective course did not run this Fall due to low enrollment
  - 1. There are still a lot of steam boilers in old houses in Kalamazoo, so one steam boiler needs to be kept in the lab.
- ii. Sheet Metal enrollment is 7 this semester, max capacity is 12.

# c. Capital

i. Coming up on a new capital request, usually submitted in November or December and approved by the summer

### d. Enrollment

- i. Still seeing a lot of full-time financial aid students
- ii. Duct design course is essential to understanding airflow
- iii. Winter 2023 Low Temp Commercial Refrigeration (required class) ran for the third year
- 7. Next meeting March, 2024
- 8. Adjournment meeting adjourned at 12:17 p.m.