

Diesel Power Technology Advisory Committee

Meeting Date: November 7, 2024

Time: 6:30pm

External Participants:

TJ Stahl – Service Manager, CIT Trucks

Jim Garner – General Manager, CIT Trucks

Doug Curry – President, Stenstrom

Corrie Confer – General Manager, Lakeside International Trucks

Sandy Seller – Human Resources Coordinator, AHW, LLC.

Eric Christian – Regional Service Manager, AHW, LLC.

Jonathon Pollack – Regional Operations Manager, Prairie State Tractor

George Orth – Maintenance Manager, Rockford Mass Transit District

Internal Participants:

Chase Budziak – Dean of Instruction

Jescelyne Gibbons – Associate Dean of Instruction

John Boesche – Diesel Power Faculty

Mark Engel – Diesel Power Faculty

Laura Gregory – Coordinator of Employment & Job Placement Services

Tricia Troyer – CDL Coordinator

Grace Wzientek – Student, Smitty Lab Assistant

Lily Goode – Student, Smitty Lab Assistant

Catherine Macias – Administrative Specialist

I. Program Update

A. Fall 2024 Enrollment

i. College-Wide Growth: Enrollment increased by 7.7% compared to Fall 2023.

ii. Diesel Power Technology (DPT) Program

1. DPT enrollment rose by 112 credit hours (+22%), equivalent to eight new full-time students. The department has seen consistent growth in enrollment for three consecutive semesters.

2. Dual credit is offered through the Kishwaukee Education Consortium (KEC). A new dual credit partnership with Johnsburg High School was established in the Fall 2024 semester.

B. Department Updates

i. Student News

1. Students participated in their annual fall field trip to Racine, Wisconsin, touring the Case IH Tractor Facility and visiting the Volo Auto Museum.
 - ii. SkillsUSA Nationals
 1. Three students competed in the national competition, with one securing first place in the Heavy Equipment Operator category. This marks the second consecutive year that Kishwaukee College has held the National Championship in this category.
 - iii. Fall 2024 Tool Day Event
 1. Students engaged with industry employers, creating opportunities for internships, particularly for the freshman class.
 - iv. Spring 2025 Diesel Power Interview Day is scheduled for Wednesday, March 5, 2024.
 - v. REV UP – Electric Vehicle Grant Update
 1. The college purchased an all-electric Volvo wheel loader, a 2021 Tesla Model Y and a 2022 Ford F-150 Lightning to enhance student training on electric vehicles. Currently looking for an all-electric mini excavator.
 2. The department encouraged feedback for curriculum during industry updates.
- II. Employer Discussion & Feedback
- A. Commercial Driver’s License (CDL) Training Opportunities
 - i. CDL training opportunities have been developed for current DPT students in response to feedback from this committee.
 - ii. The first cohort of eight Kish sophomore DPT students will begin CDL training in January 2025.
 - iii. Tuition for this program is offset by the Non-Credit Workforce Grant from the Illinois Community College Board, ensuring accessibility and affordability for students.
 - iv. The program will expand to offer CDL training annually in January, May, and June.
 - v. Diesel Power Faculty Mark Engel is embedding pre-trip inspection content into the Truck Brakes and Suspension course, aligning classroom instruction with CDL requirements.
 - B. Industry Updates
 - i. Upcoming changes to 24-Volt and 48-Volt Systems
 1. The 24-volt system, more efficient than the current 12-volt system, will be widely implemented in new vehicles. Cummins

is set to introduce a 48-volt system, anticipated to revolutionize the industry.

2. Advanced electrical classes are critical for preparing students to understand and work with these systems.
 3. While these innovations increase efficiency and industry sales, they present a steep learning curve for technicians.
- ii. Predictive Diagnostics for Autonomous Tractors and Electric Buses
 1. AI-Driven Maintenance: Autonomous systems now predict maintenance needs without human operators.
 - iii. Transmission Challenges
 1. Issues persist with tractors switching between electric and mechanical drives.
 - iv. Electric Bus Information
 1. Frequent solenoid failures in battery packs.
 2. Efficient driving allows buses to complete routes on a single charge, though some drivers intentionally drain batteries to use diesel heaters.
 3. Companies are exploring battery recycling, repurposing, and robotic systems for battery swapping.
 - v. Technical Writing and Technician Efficiency
 1. Detailed diagnostic notes are essential for warranty claims and ensuring service efficiency.
 2. Encouraging technicians to shadow experienced professionals and maintain clear repair records reduces miscommunication and improves customer satisfaction.
 3. Recommendation to review technical writing courses DPT students take to ensure that appropriate writing skills are being taught for industry. (Note: The technical writing course, English 109, is undergoing a redesign in Fall 2025 based on feedback from several advisory committees.)