

POWER GENERATION VPP WORK GROUP

Q1, 2026

February 12, 2026

**Please check in on the chat function with
your name, title and company. Feel free to
add email**



Safety Moment

Presented By:

Jason Shaw, CSP, CSHO

Regional Safety Manager

Vistra Corp.





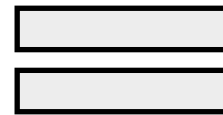
Safety Moment

2/12/2026

When Conditions Change, Risk Changes

Our sites perform complex work safely every day.

Industry events show that risk often increases **after work has started**, when conditions change and the plan is not deliberately revalidated.



Real World Event

At a power generation facility, a maintenance crew was completing work on an auxiliary system following an outage. The system had been **properly isolated, locked, and tagged**, and work progressed as planned.

As the job neared completion:

- One crew member began **reinstalling components**
- Another group, working under a **different clearance**, began restoring an upstream portion of the system
- The interface between the two work groups was **not clearly communicated**

During restoration:

- A valve was repositioned and a breaker was closed upstream
- Energy was reintroduced into a portion of the system still being worked
- A worker was exposed to a sudden **pressure and movement hazard**, resulting in serious injury

Contributing Factors

Work Coordination Gaps

- Multiple clearances existed on the same system
- System boundaries were **assumed**, not clearly verified
- Turnover communication did not explicitly state **work still in progress**

Change Management

- The original job plan was valid—but **conditions changed**
- No formal pause or re-brief occurred when restoration activities began
- Restoration risk was not treated with the same rigor as isolation

Human Performance Traps

- **Time pressure** to return equipment to service
- “Almost done” mindset reduced questioning
- Workers relied on expectations rather than **current system status**



VPP Aligned Focus Areas

Hazard Recognition

- Restoration is a **high-risk evolution**
- Energy can return faster than expected if boundaries are unclear

Employee Involvement

- VPP culture requires workers to ask:
 - *“Who else is working on this system?”*
 - *“Has anything changed since we started?”*



VPP Aligned Focus Areas

Work Control Discipline

- Clearance boundaries must be **physically and verbally verified**
- Restoration requires the same level of pre-job rigor as initial isolation
- Never assume another group knows your work status

Human Performance Tools


- Conduct **pause points** before restoration
- Use **three-way communication** for clearance transfers
- Perform **concurrent activity checks** during outages







Safety Moment Bonus – Using AI




For those that have not embraced AI to assist with Safety Moments


- Sample prompts used for this safety moment:




 **You (Jason Shaw)**
put together safety moment. The audience is power generation voluntary protection program sites.

 **Odin (GPT-5.2 Chat)**  
Here's a concise, ready-to-deliver **Safety Moment** tailored for **Power Generation Voluntary Protection Program (VPP)** sites. It reinforces VPP principles while remaining practical for daily operations.

 **You (Jason Shaw)**
add a recent industry event

 **Odin (GPT-5.2 Chat)**  
Below is the same **Safety Moment** with a **recent industry event** added, written carefully to reflect **documented industry learning** without assigning dates, companies, or speculation—appropriate for VPP audiences.

 **You (Jason Shaw)**
can you add more detail and specifics to the real world event

 **Odin (GPT-5.2 Chat)**  
Below is an expanded version with **clearer technical detail** while still framed as an **industry learning event**, not a single identifiable incident. This level of specificity is typical for VPP discussions and supports hazard recognition without speculation or attribution.



Safety Moment Bonus – Using AI



You (Jason Shaw)

Please provide another real world event and details



Odin (GPT-5.2 Chat)



Below is **another detailed real-world industry event**, distinct from the stored-energy example, and commonly used in VPP environments to reinforce **situational awareness, work control, and human performance**.



You (Jason Shaw)

put these two safety moments in a downloadable format for me, and create a combined safety moment



Odin (GPT-5.2 Chat)



I've created a **downloadable, print-ready document** that includes **both individual safety moments** and a **combined safety moment** tailored for **VPP power generation sites**.

What's Included

- **Safety Moment #1:** Stored / Secondary Energy Release During Maintenance
- **Safety Moment #2:** Unexpected Energization During System Restoration
- **Combined Safety Moment:** Common themes, VPP expectations, and group discussion
- **One page per section**, formatted for toolbox talks, shift briefs, or VPP documentation

Download

[Download the Safety Moments Document \(Word\)](#)



Thank You!

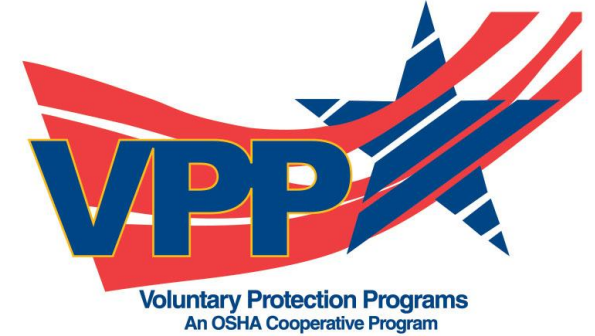
VPP Updates

Since last meeting:

New VPP Applications
Submitted or Accepted

Initial VPP Approvals

VPP Reapprovals



Special Government Employees (SGE)



Training and Opportunities

- 13 SGE training classes are scheduled through July of 2026. <https://www.osha.gov/sge/sge-training>
- SGE Opportunities – <https://www.osha.gov/sge/onsite>
- For more SGE Program Information - <https://www.osha.gov/sge>



VPP Element

- Management Leadership and Employee Involvement
- **Worksite Analysis**
- Hazard Prevention and Control
- Safety and Health Training



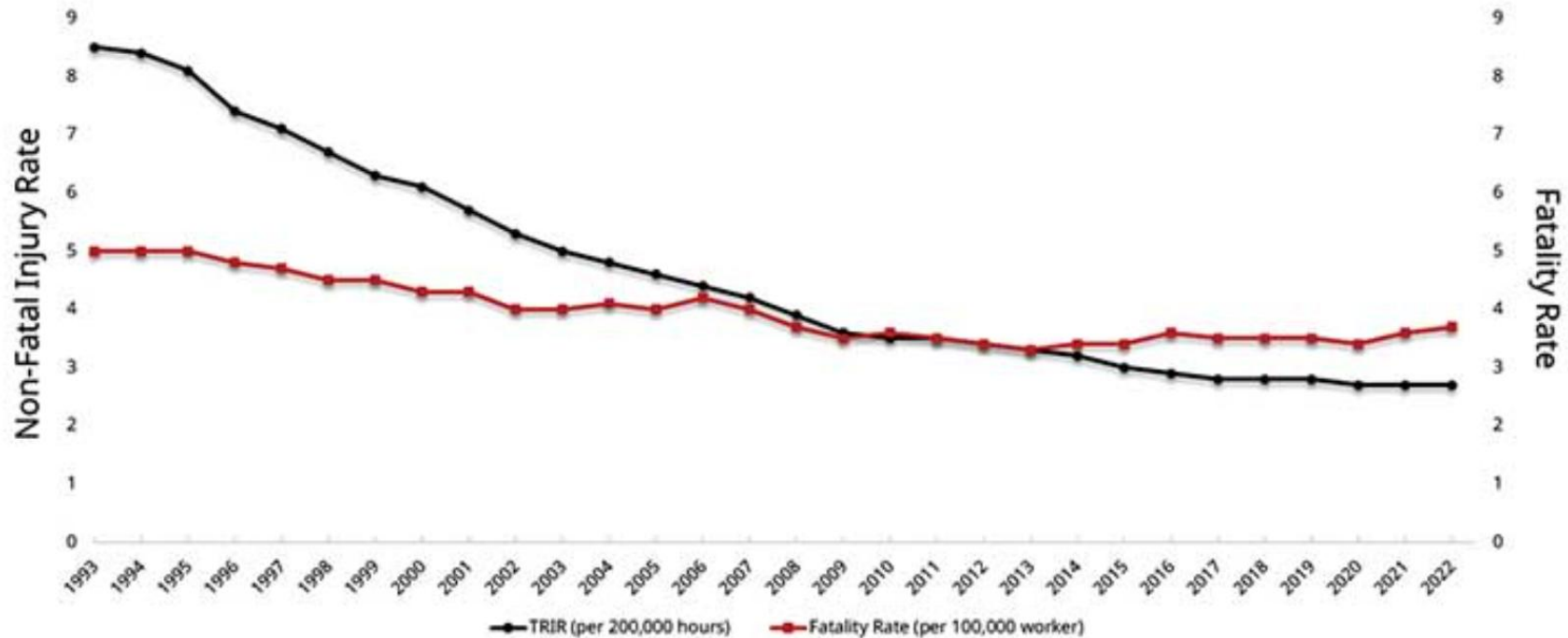


Preventing SIFs through Energy Based Safety

John Condry, CSP

SIF Prevention

The Serious Injury and Fatality Challenge Across All Industries



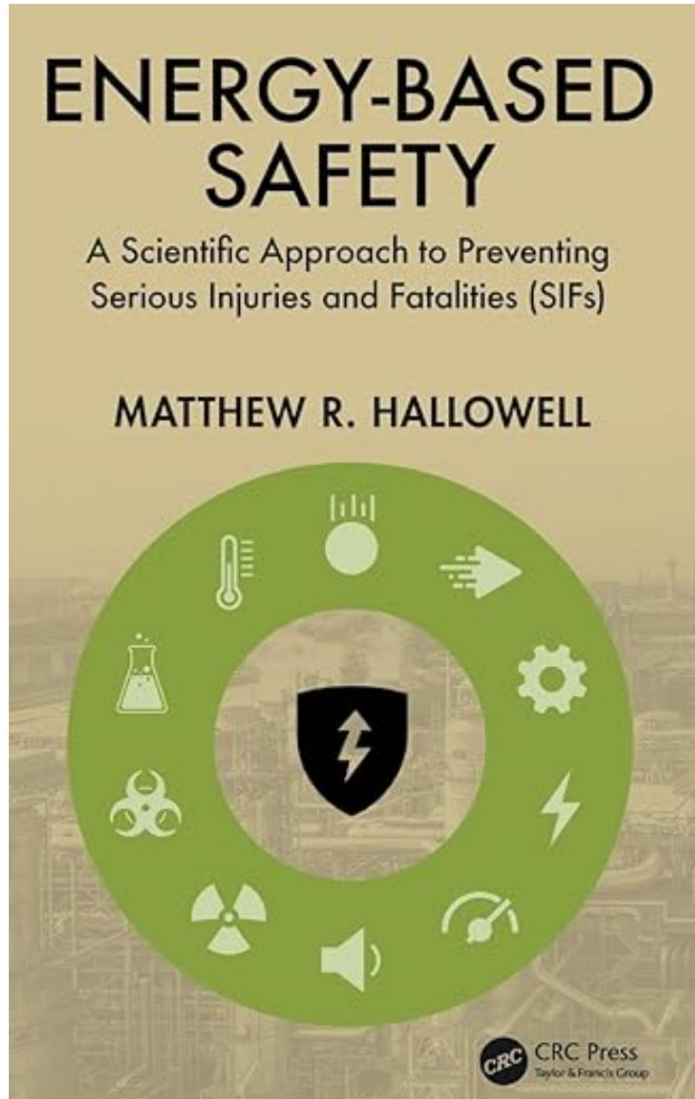
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Source: U.S. Bureau of Labor Statistics



- While non-fatal injury rates have improved, fatalities have remained virtually unchanged for decades
- The stuff that hurts people is not the same at the stuff that kills people!

Energy Based Safety



- Energy Based Safety is not a new concept
- What is new: Matthew Hallowell's research into Energy Based Safety
- Who is Matt Hallowell?

Principles of Energy Based Safety

Energy causes harm

Identify all types of hazards using the energy wheel

More energy causes more harm

Prioritize STKY by focusing on high-energy hazards

Controls save lives

Control the STKY with Direct and Alternative Controls

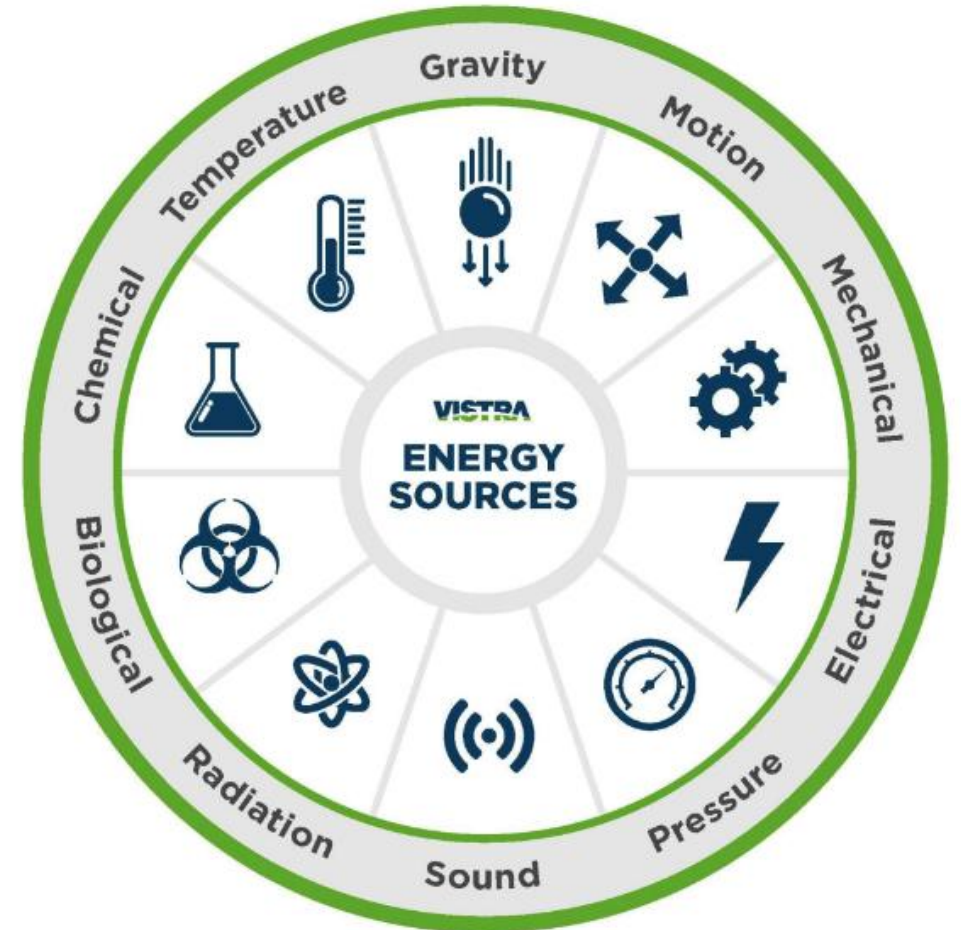
People driven performance

Understand how context impacts energy control

The Energy Wheel: Hazard Identification Tool

The Energy Wheel is a tool which strengthens our ability to identify sources of energy.

- Start at gravity and work clockwise
- Systematically walk through each category
- Use prior to starting work and periodically throughout the day



Sources of Energy

Gravity

- Dropped Object Potential
- Working from Heights
- Suspended Loads
- Using Ladders/Stairs
- Uneven Work Surfaces
- Open Hole
- Working Above Handrails
- Suspension Trauma

Motion

- Vehicular Traffic
- Pedestrian Traffic
- Mobile Equipment
- Airborne Debris
- Projectiles
- Ergonomics: Body Positioning/Movement
- Vibration

Mechanical

- Augers
- Motors
- Rotating Shafts
- Cables/Chains/Pulleys
- Pinch/Nip Points
- Conveyors
- Presses
- Blades/Sharp Objects

Electrical

- Damaged/Exposed Wires
- Power Lines
- Power Tools
- Energized Equipment
- Extension Cords
- Power Strips
- Transformers/Relays
- Batteries

Pressure

- Piping Systems
- Hydraulic Lines
- Excavations/Trench
- Engulfment Hazard
- Compressed Cylinders
- Pumps
- Powder Actuated Tools
- Explosives
- Pneumatics

Sound

- Hammering/Chipping
- Impact Wrenches
- Power Tools
- Powder Actuated Tools
- Grinding/Gouging
- Machinery
- Pumps/Motors
- Abrasive Blasting

Radiation

- Nuclear Gauges/Analyzer
- Radioactive Decay
- Welding
- Sun Exposure
- X-Ray Testing (PMI Gun)
- Radiography
- Lasers

Biological

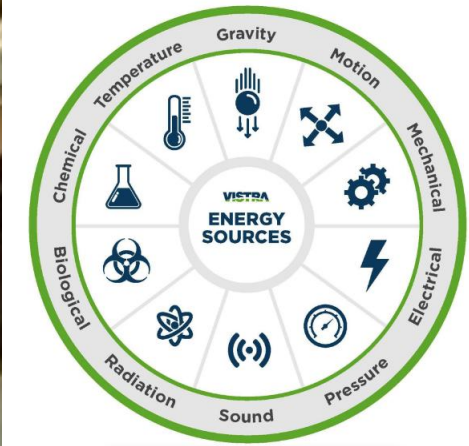
- Animals
- Snakes
- Insects
- Viral/Bacterial
- Poisonous Plants
- Molds
- Blood
- Feces

Chemical

- Solvents
- Cleaning Products
- Silica/Asbestos
- Combustible Dust
- Wet Concrete
- Engine Exhaust
- Acids/Caustics
- Nitrogen
- Lead

Temperature

- Hot/Cold Environment
- Open Flames
- Engines/Manifolds
- Steam/Exhaust Pipes
- Hot Work Area
- Hot/Cold Work Environment
- Chemical Reaction
- Cryogenics



Hazard Identification: Myths and Facts















Myths

- We think we can see a hazard if it is present.
- If a hazard will emerge during the work period, we can anticipate it before beginning work
- We overlook hazards because we are distracted, complacent, or poorly trained.
- Age and experience make it easier to identify hazards.

Facts

- At our best we can only identify ~45% of hazards prior to starting work.
- We only recognize ~30% of the hazards that emerge as work conditions change throughout the day.
- Gravity and motion hazards are the easiest for us to identify.
- More experience leads to more familiarity with the hazard, and how to respond, but not the ability to identify.

Identifying High Energy (Stuff That Can Kill You-STCKY)

<p>Gravity</p>  <p>Suspended load</p>	<p>Motion</p>  <p>Mobile equipment/traffic with workers on foot</p>	<p>Mechanical</p>  <p>Heavy rotating equipment</p>	<p>Temperature</p>  <p>Steam</p>	<p>Pressure</p>  <p>Explosion</p>	<p>Electrical</p> <p>≥ 50 V</p>  <p>Electrical contact with source</p>	<p>Chemical/ radiation</p>  <p>High dose of toxic chemical or radiation</p>
<p>Gravity</p>  <p>≥ 4 ft</p> <p>Fall from elevation</p>	<p>Motion</p> <p>≥ 30 mph</p>  <p>Motor vehicle incident (occupant)</p>	<p>Temperature</p>  <p>≥ 150 °F</p> <p>High temperature</p>	<p>Temperature</p>  <p>Fire with sustained fuel source</p>	<p>Pressure</p> <p>≥ 5 ft</p>  <p>Excavation or trench</p>	<p>Electrical</p>  <p>Arc flash</p>	<p>Other</p> 

What is High Energy?

Dr. Hallowell's research has shown incidents with energy greater than **500 FT-LBS** are likely to be fatal.



Most suspended loads easily meet the high energy threshold of 500 ft-lbs. EX: A 500 LB load just 1 foot off the ground equals 500 ft-lbs.

Note: This category also includes dropped objects.



Considering the average weight of a human is more than 150 lb, 4 ft of elevation (measured from the ground surface to the bottom of the feet) exceeds the high energy threshold.

What is High Energy?



Pedestrian Standpoint: Because of the mass, most mobile equipment including motor vehicles exceeds the high-energy threshold when the equipment or vehicle is in motion at any speed.

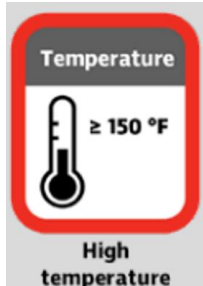


Driver/Occupant Standpoint: Estimations of the motor vehicle speed typically involved in serious or fatal crashes vary greatly from the National Transportation Safety Board, National Highway Transportation Safety Association and the U.S. Department of Transportation. The team selected a conservative estimate of 30 mph as the high-energy threshold.

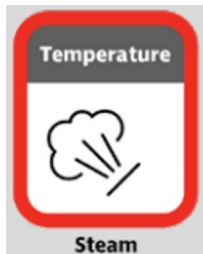


Computing mechanical energy can be complex. Thus, all heavy rotating equipment beyond powered hand tools typically exceed the high-energy threshold and should be considered high energy.

What is High Energy?



According to the American Burn Association (2023), exposure to any substance >150 °F typically causes third-degree burns when contacted for 2 seconds or more.



According to the American Burn Association (2023), any circumstance with the release of steam exceeds the high-energy threshold.



According to the North American Combustion Handbook (Reed, 1978), a lightly combustible material such as paper burns at approximately 700 °F, far exceeding the temperature threshold. Fire with a sustained source of fuel exceeds the highenergy threshold.

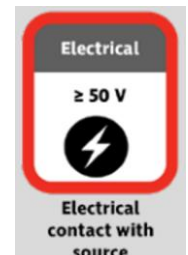
What is High Energy?



Most incidents described as an explosion exceed the high-energy threshold.



An exposure to unsupported soil in a trench or excavation more than 5 ft deep exceeds the high-energy threshold. Typically, for each foot of depth, soil pressure increases by about 40 lb per square foot. Thus, at a depth of 5ft, the pressure is approximately 200 lb per square foot.

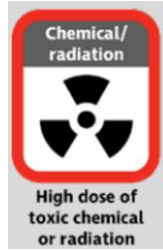


Electricity > 50 V is sufficient to result in serious injury or death according to NFPA 70E (2024).



Any arc flash exceeds the high-energy threshold because of the voltage exposure according to NFPA 70E (2024). Also, permissible distances are covered in 29 CFR 1910.333, in particular, section 1910.333(c)(3)(ii)(C).

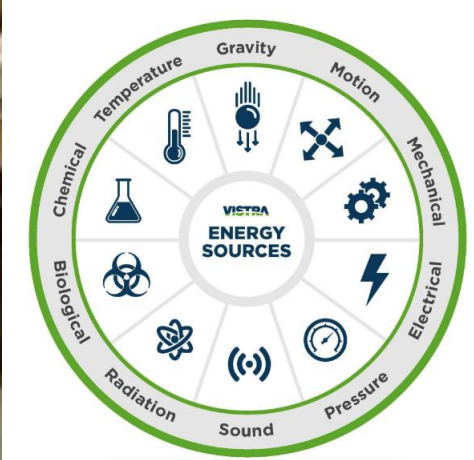
What is High Energy?



Exposure to toxic chemicals or radiation. An industrial hygienist, chemist, toxicologist, or other competent person should be involved in the assessment of toxicity and acceptable exposure limits.



[Safetyfunction.com](https://www.safetyfunction.com) Energy Calculator



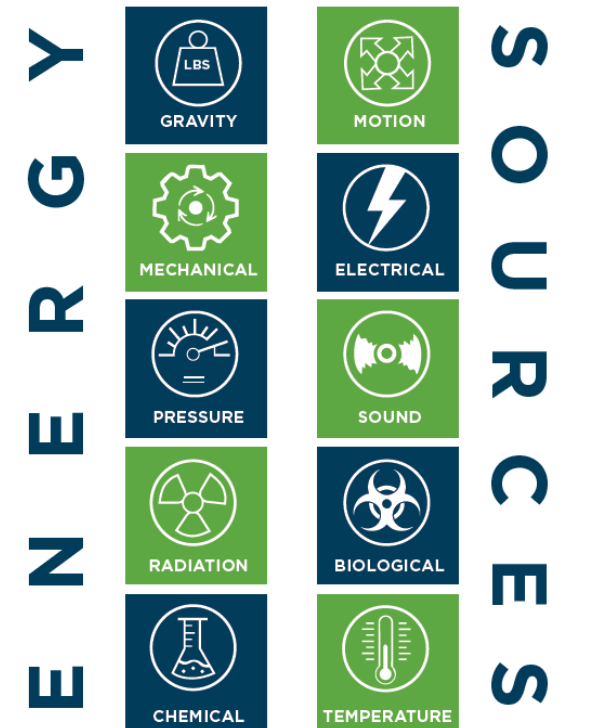
Benchmarking Opportunity

- We would like to do some benchmarking on EBS.
- We will create a survey and send out in the next month.
- Would anyone like to share the Energy Wheel tool they use?
- Is anyone using a digital tool?
- Does anyone have a PJB Form that includes EBS?



HAZARD RECOGNITION

Preventing Serious Injuries & Fatalities



Questions?

OSHA Alliance Agreement

2026 Renewal

OSHA Alliance Agreement

- A little history:
 - The original agreement was signed with Region 8 OSHA in March of 2023.
 - We came up for renewal in 2025, but with the upheaval in the federal government, we didn't get the renewal until late in the year.
- Update:
 - The new agreement is in final draft and we are waiting for OSHA to finalize the document
 - Alex and Kelli will be signing the document on behalf of the PGVPP. This is a testament to the strength of this group and willingness of OSHA to partner with us.

2026 Benchmarking Project

- As part of our Alliance agreement, we are asked to develop a major project during the life of our agreement.
 - Our first benchmarking project was QEW, which was lauded by OSHA for being well written and being made available to our membership.
- Our 2026 benchmarking project will center around internal auditing practices. We have a good start with a prior presentation by one of our group and we will be building on that for the benchmarking project this year.
- You can expect some type of survey in the near future and we'd like to get some volunteers to serve on the committee that compiles this information and develops a final product from that information.

Best Practices



Zachary Sisk, CHST, STSC

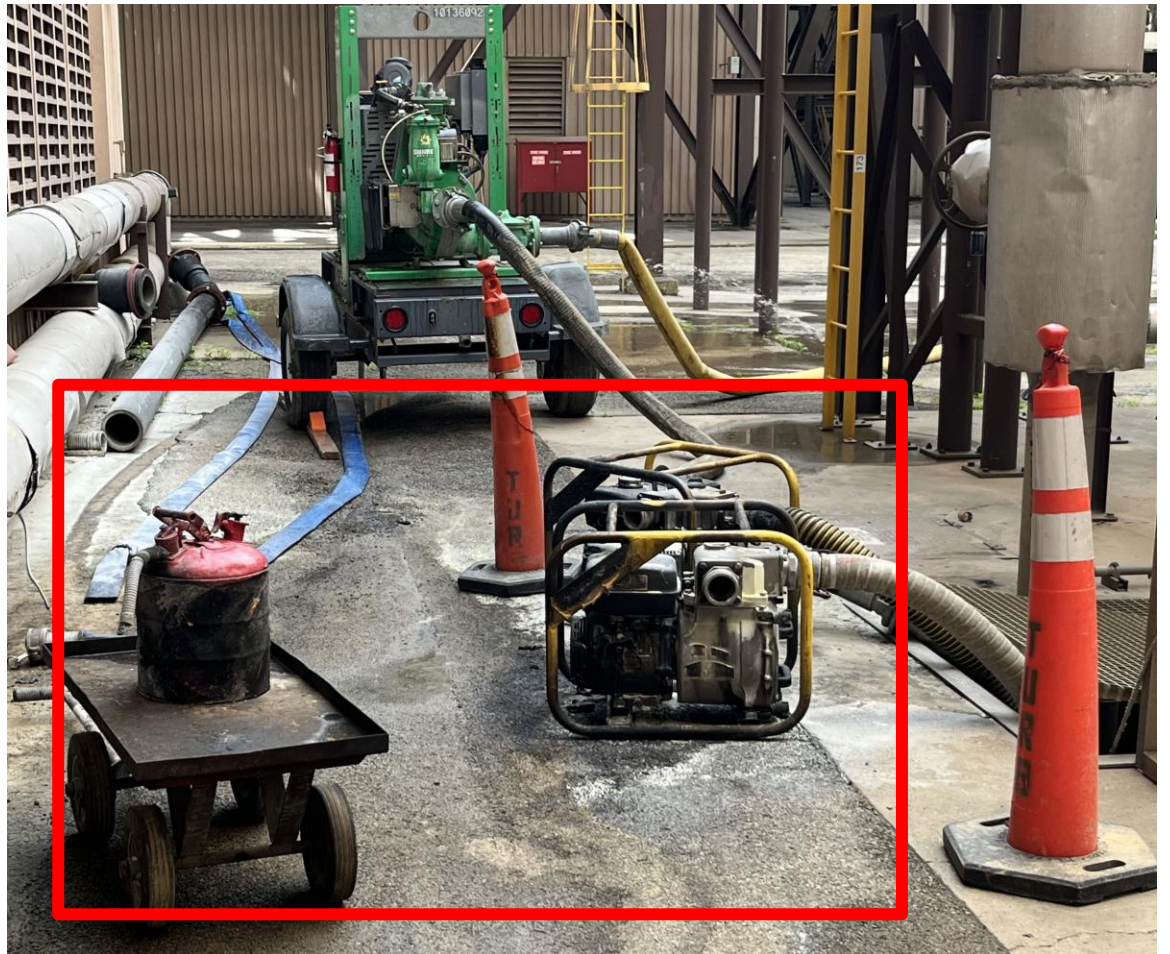
Safety Specialist

Vistra Corp

Event

Incident Description:

- During a refueling operation, gasoline overflowed the gas tank of the pump and ignited when it contacted the exhaust manifold.
- Two pumps and the gasoline can were damaged by the fire.
- Fire was completely extinguished with a 20lb dry chem extinguisher.



Safety Fuel Cans



Pro Active Safety Engagements

- Lock out / Tagout Audits
- Pre-job Brief Audits or Lead
- Electrical Safe Work Practice Audits
- Confined Space Audits

* **Date**

2/11/2026

* **Leader**

Zachary Sisk

* **Site Location**

Type of Engagement

Description of Engagement

Please provide a brief description of the engagement completed.

Proactive Safety Engagements

- Provides real time feed back on areas of improvement.
- Help leaders engage with front line workers.
- Creates transparency on our processes and systems.

“Without continual growth and progress, such words as improvement, achievement, and success have no meaning.”

Benjamin Franklin



Open Discussion

Questions?



Suggestions?

Discussion points?



2026 VPPPA Conference Schedule

- Region 1 - May 20-21, Portland, ME
- Region 2 – April 28th , Atlantic City, NJ
- Region 3 – April 26 – May 1, Williamsburg, VA
- Region 4 – June 2-4 , Mobile, AL
- Region 5 – May 4-7, Lake Geneva, WI
- Region 6 – May 18-21, Little Rock, AR
- Region 7 – More Details to Come
- Region 8 – May 12-14, Denver, CO
- Region 9 – April 14-16, Reno, NV
- Region 10 – May 19-21, Boise, ID
- VPPPA Safety+ - Aug. 30 – Sept. 2 , Nashville, TN



2025 Meeting Schedule

~~February 12th~~

May 14th

August 13th

November 12th

Meetings are scheduled from 1430 – 1600ET
(1230 – 1400MT)

