Cal/OSHA Cites Poway Energy Technology Company $58,025 for Industrial Flywheel Explosion that Injured Four Workers

San Diego—Cal/OSHA today cited Quantum Energy Storage Corporation in Poway $58,025 for a June 10 explosion caused by an out-of-control 11,000 pound metal flywheel. One worker suffered a broken ankle and three others were treated for abrasion injuries caused by flying debris from the explosion.

“California employers must take precautions to protect employees from on-the-job hazards, including machinery operated in closed, confined spaces,” said Cal/OSHA Chief Juliann Sum. “The workers harmed by this explosion could have died because the employer did not secure or cover the flywheel to prevent the release of mechanical energy.”

Cal/OSHA investigators learned that the nearly seven feet in diameter flywheel was placed in a concrete vault area installed in the warehouse for tests of the energy storage system. Prior to the accident, the flywheel was spinning at 6,000 rotations per minute, and had just begun the process of winding down when it failed. The flywheel came loose from its moorings and crashed into the vault’s guard rails, causing enough damage to the building’s roof, interior and walls that the building was deemed unsafe to enter after the accident.

No steps had been taken to enclose the vault or minimize hazards where the employees worked. Computer stations were not located at a safe distance nor were they designed to limit employee exposure in the event of uncontrolled release of electrical or mechanical energy.

Cal/OSHA issued 16 citations to Quantum Energy Storage for violations of multiple health and safety standards, including the safe practices for operating machinery standard. The citations included five that were serious in nature and one classified as serious accident-related. A serious violation is cited when there is a realistic possibility that death or serious harm could result from the actual hazardous condition.

Cal/OSHA helps protect workers from health and safety hazards on the job in almost every workplace in California. Cal/OSHA’s Consultation Services Branch provides free and voluntary assistance to employers and employee organizations to improve their...
health and safety programs. Employers should call (800) 963-9424 for assistance from Cal/OSHA Consultation Services.

Employees with work-related questions or complaints may contact DIR’s Call Center in English or Spanish at 844-LABOR-DIR (844-522-6734). The California Workers’ Information line at 866-924-9757 provides recorded information in English and Spanish on a variety of work-related topics. Complaints can also be filed confidentially with Cal/OSHA district offices.

Members of the press may contact Erika Monterroza or Peter Melton at (510) 286-1161, and are encouraged to subscribe to get email alerts on DIR’s press releases or other departmental updates.

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The California Department of Industrial Relations, established in 1927, protects and improves the health, safety, and economic well-being of over 18 million wage earners, and helps their employers comply with state labor laws. DIR is housed within the Labor & Workforce Development Agency. For general inquiries, contact DIR’s Communications Call Center at 844-LABOR-DIR (844-522-6734) for help in locating the appropriate division or program in our department.