

Energizing the Future

Who needs fuel, power, and water?

by Capt Timothy Lang, CWO3 Anthony Cercone, CWO2 James Nieves,
CWO2 Agrepina Diego, CWO2 Matthew Wilson & CWO2 Juan Villar

Imagine being given the opportunity to form what was once an idea and is now a reality! In 2021, 3d MLG tasked subordinate commands with creating a company that would improve fuel, power, and water sustainment to address concerns with operational design and contested logistics. In less than 30 days, Energy Company became the first of its kind. The idea of combining the MOSs of utilities and bulk fuel Marines under one formation suddenly became real. In July of 2021, the first “off-the-shelf” energy company formed from an amalgamation of bulk fuel company and utilities platoon, 9th Engineer Support Battalion (9th ESB). During the life cycle of Energy Company, senior leadership made decisions to better facilitate the general support mission to III MEF, including realigning the company under Combat Logistics Regiment 3, instead of their original 9th ESB hierarchy. Most recently, the company was redesignated under 3d Landing Support Battalion (3d LSB).

The history of Energy Company is comparable to a ship venturing into unexplored waters. Now, the Marines of Energy Company, 3d LSB, seek to embody the Marine Corps legacy of innovation. Forging an unbeaten path, it is evident that the current structure, capabilities, and outlook for future energy companies are not perfected.

However, because of the lessons learned during this experiment, it is our opinion that cohesive and multi-discipline small-unit teams led by a dedicated headquarters element with energy subject-matter experts are the bid for success to distribute fuel, power, and water in a contested logistics environment. To fully comprehend this thesis, it is imperative to first understand En-

>>>> Capt Lang is a Combat Engineer Officer and is serving as the Energy Company Commander.

>>> CWO3 Cercone is a Utilities Officer and is serving as an Energy Platoon Commander.

>>>> CWO2 Nieves is a Bulk Fuel Officer and is serving as an Energy Platoon Commander.

>>>> CWO2 Agrepina is a Utilities Officer and is serving as Utilities Operations Officer.

>>>> CWO2 Wilson is a Bulk Fuel Officer and is serving as Bulk Fuel Operations Officer.

>>>> CWO2 Villar is a Bulk Fuel Officer and is serving as an Energy Company Executive Officer.

ergy Company’s framework, specifically its organizational structure.

For the past 21 months, bulk fuel and utilities Marines have been working alongside each other, cultivating an environment of efficiency and interoperability in garrison and field operations. This professional rapport has

platoon commander and a utilities chief. These Marines interacted and learned each other’s occupations daily. In the year this platoon was together, they supported four major exercises by deploying integrated teams led by small-unit leaders. In turn, those small-unit leaders gained the confidence and trust

In 2021, 3d MLG tasked subordinate commands with creating a company that would improve fuel, power, and water sustainment to address concerns with operational design and contested logistics.

proven valuable in ways that result in a smaller deployable footprint of Marines that speak the same language. Energy Company’s first experimentation with internal structure started with one energy platoon from both communities led by a bulk fuel pla-

toon commander and a utilities chief. These Marines interacted and learned each other’s occupations daily. In the year this platoon was together, they supported four major exercises by deploying integrated teams led by small-unit leaders. In turn, those small-unit leaders gained the confidence and trust



Cpl Brenden Hill, a bulk fuel specialist with Energy Company, supervises the refueling of a CH-53 at a FARP during Resolute Dragon 2021. (Photo by CWO2 Juan Villar.)

personnel and equipment to support operational requirements. Exploiting a second year of experimentation, Energy Company built on the successes, experience gained, and identified shortfalls in the integrated platoon. The entire company was restructured into two large energy platoons led by the senior bulk fuel and utilities chief warrant officers and their bulk fuel and utilities chiefs. Each platoon has

integrated bulk fuel/utility squads of approximately 24 Marines designed as a base unit, capable of deploying, disaggregating, or scaling with additional squads to provide tactical energy support across multiple sites. As Energy Company structure's quality, performance, and reliability continue to be tested, we must reevaluate significant changes to company capabilities and limitations.



Energy Company exercising insert, setup, and displacement of water points, refuel point, and water site recon with WQASP. (Photo by CWO2 Agrepina Diego.)

Energy Company was tasked with the mission to provide general support, tactical-level fuel, water, and power sustainment through procurement, quality assurance, storage, and distribution to enable III MEF maneuver. This wide range of tasks across III MEF's expected maneuver space and increasing demand for energy capabilities in small teams will require Energy Company Marines to perform at a level senior to their current tenure. Energy Company has been empowering those Marines as squad leaders and allowing them to cultivate the skills required to operate effectively in a training environment. Their knowledge base could be further emboldened by the incorporation of higher-level concepts earlier in professional military education and follow-on military occupational schools.¹

A network of long-distance and varied distribution sites will need to be established and operated concurrently to retain the element of surprise as the warfighter advances, allowing them to maneuver with cover and concealment in the battle space.² Various methods of logistics will be tested to insert fuel and utilities assets to the fight. Energy Company capabilities will be required from the forward edge of the battlefield to the combat sustainment area.³ This includes the joint effort of prepositioning assets using surface, subsurface, and aerial nodes of transportation to rapidly deploy resources to the conflict.⁴ The current formation of Energy Company must retain a balance of resources to support the Indo-Pacific Command key players to include the MEF and newly developed commands such as Marine Littoral Regiments. The main limiting factor is that the company's structure is a combination of two legacy formations, specifically 9th ESB's bulk fuel company and utilities platoon structure, not a unit built out of the requirements levied on it from its mission. Tactics, procedures, and technology will continue to be refined to provide critical utility and bulk fuel support in the III MEF Area of Responsibility.

We would be remiss to not address concerns for Energy Company's hierarchy within the LCE. The question remains: under which echelon of forces

would Energy Company best support III MEF's scheme of maneuver? Current Force Design guidance implies 9th ESB will experiment and transition into a pioneer battalion. 3d LSB is postured under the Marine Logistics Support Group concept to become a regional support battalion, in contrast to the distribution support battalions in I and II MEF. The Logistics Experimentation Campaign Plan for Fiscal Year 22 to 25 has energy capabilities resident within pioneer battalion as it takes on missions to open infrastructure and enable freedom of maneuver in the littorals.⁵ In crude comparison, it appears that pioneer battalion will cut new paths for the force and the future LSB will use those paths to sustain the force. Energy Company could exist and provide support to the MEF within either of these formations, but LSB's specific focus on deploying sustainment capabilities is closer to the operational requirements placed on Energy Company. Combat Logistics Regiment 3 repositioning the company under 3d LSB's general support mission to III MEF is a measured effort to test this theory. Energy Company employment under a regional support battalion may give MEF slightly more advantage and enable pioneer battalion to focus on an already diverse mission set during the challenges of great power competition in a contested logistics environment.

Initial Force Design trends showed separate utilities and bulk fuel squads spread across the combat logistics battalion structure within the combat logistics companies.⁶ These disconnected squads may be able to provide some organic ground sustainment capacity to the battalions internally. However, the squad organization and equipment template as they exist would have insufficient capacity to support the Class III fuel requirements of a MEF. Especially in view of the time, terrain, and distance challenges of the Indo-Pacific Command Area of Responsibility, we argue that a cohesive unit akin to Energy Company will provide better support in a general support mission to the MEF versus disaggregated organic squads under the combat logistics companies. Although the idea of a consolidated en-

ergy company appears contrary to the argument for empowering small-unit leaders, the reality is that the squad leaders will be more proficiently trained, equipped, and ready when supported by staff noncommissioned officers and chief warrant officers from within their occupational fields. Energy-focused platoon and company leadership will enable squad leaders to gain more training opportunities in garrison and reach back to deeper subject-matter expert experience while deployed. Energy capabilities can best sustain the FMF when employed as a unit that can arrange its support in concert with the MEF's priorities.

Company squads deploy in support of contingency operations, it is imperative that each team be capable to assess fuel infrastructure, interoperability, and compatibility of equipment and identify the type of fuel within the foreign or allied nation. These new concepts of employment for sustainment, using a combination of conventional and unconventional tactics to gain the advantage, will enable the Marine Corps to better support maritime forces.

Energy Company's future is by no means definite, but unlike a lost vessel at risk to run aground in uncharted waters, we have a deliberate bearing. The concept behind an integrated squad is

Increasing the presence of utilities joint training will reinforce relationships with host nations and retain a foothold to salvage and preserve critical resources for our allies and troops on the ground.

Joint and bilateral training with DOD agencies and host nation personnel are also an investment for success. Mission essential tasks are being revised and tested to accommodate warfighters to remain competitive in the near-peer fight. Utilities personnel are in high demand to test entry-level skills to forage power and water in an unknown, foreign, and contested environment. Increasing the presence of utilities joint training will reinforce relationships with host nations and retain a foothold to salvage and preserve critical resources for our allies and troops on the ground. Non-commissioned officers are heavily relied upon to conduct reconnaissance and initiate innovative methods of employment with little to no resources in the theatre of operation. Additionally, Energy Company does not yet have the capability or training to identify fuel facility infrastructures or conduct quality assurance of fuel sources, including those that are unknown. This limitation impedes our ability to enhance operational-level energy requirements and resiliency in support of contested logistics energy distribution. As Energy

to create a more agile capability package with a joint effort of utility and bulk fuel fire teams to provide critical energy to the warfighters. The company and platoon-level leadership will focus on coordination and transition between operational logistics entities and providing quality and compatibility assurance on foreign water treatment, power, and fuel infrastructure.⁷ Squad-level leadership will focus on providing the pacing commodity and critical life support sustainment in the realm of tactical logistics while experimenting with maximizing capabilities to maintain mission readiness and incorporating tactical signature management discipline to mitigate operations within the weapons engagement zone.⁸ Additionally, rotating squads will compensate for high operational tempo while enabling a cycle of resource preparation and increasing combat readiness. As one squad supports exercises, another prepares for deployment in garrison, a third performs essential maintenance, and a fourth expands the limit of the company's capabilities through experimentation. Realigning deployment and



Follow on experimentation will include nonstandard capabilities and procedures to reduce physical and electromagnetic signatures in comparison to legacy set ups. (Photo by Sgt Levi J. Guerra.)

formation concepts are not limited to conventional equipment sets. Energy Company Marines have employed unconventional warfighting capabilities that meet the demands of the ever-changing competition continuum. Although this article is not the venue to discuss in detail, these capabilities include platoon water purification systems, battery, and solar power sources, new potable water storage and distri-

bution systems, as well as fuel additive injection capabilities to increase the sustainability and recoverability in the region. We hypothesize the combat service support provided by the company will be more self-sufficient and agile for future units using this employment approach and future capabilities.

It is our opinion that an organization compiled of subject-matter experts focused on providing tactical power, water purification, and fuel will be a key enabler to the FMF. In this dynamic environment, marked by changing missions and unit structure poised against a backdrop of great power competition, we request that Marine Corps stakeholders consider these lessons learned and the innovative capabilities that Energy Company brings to the fight while refining Force Design.

Energy Company Marines have employed unconventional warfighting capabilities ...



Cpl Taylor, a water support technician with Energy Company, Combat Logistics Regiment 3, primes the raw water pump during Exercise RESOLUTE DRAGON 22 at Kamifurano Maneuver Area, Hokkaido, Japan. (Photo by Cpl Moises Rodriguez.)

Notes

1. Gen David H. Berger, *Talent Management 2030*, (Washington, DC: November 2021).
2. LtGen Eric M. Smith, *Tentative Manual for EABO*, (Washington DC: February 2021).
3. BGen Stephen J. Lightfoot, *Logistics Experimentation Campaign Plan FY 22–23*, (Washington, DC: July 2022).
4. BGen Brian N. Wolford, *3d MLG's Nine Ways to Win Contested Logistics*, (Okinawa: April 2021).
5. Ibid.
6. Gen David H. Berger, *Force Design 2030*, (Washington, DC: March 2020).
7. Headquarters Marine Corps, *MCDP 4, Logistics*, (Washington, DC: April 2018).
8. Marine Corps Intelligence Schools, *Signature Management (SIGMAN) Electromagnetic Controls (EMCON) SOP: A Guide to Reduce Technical Signature*, (Virginia Beach: November 2020).



Reproduced with permission of copyright owner. Further reproduction
prohibited without permission.