

FAQ: UAMPS Millard County Utah Peaking Plant

What is the purpose of the proposed Millard County peaking plant?	Operating on a non-profit basis, UAMPS delivers comprehensive wholesale electric energy services, providing reliable, affordable, and sustainable energy solutions for its 50 members from Utah, Arizona, California, Idaho, Nevada, New Mexico, and Wyoming. The proposed Millard County peaking plant is essential for ensuring that UAMPS member communities have access to electricity as their energy needs grow. This innovative facility is specifically designed to complement renewable energy sources like wind and solar by filling the hourly and daily gaps in power supply that these intermittent resources create. By doing so, it guarantees grid stability and helps prevent power outages, ensuring that homes and businesses have uninterrupted access to the electricity they need. The plant's quick-response capability and high efficiency make it a crucial component of a resilient and sustainable energy infrastructure, supporting the transition to a greener future while maintaining dependable service today.
What type of power generation will the plant use?	The Millard County Peaking Plant will utilize state-of-the-art power generation technology in the form of a 200 MW Simple Cycle-style Generation Plant equipped with 10 to 11 Reciprocating Internal Combustion Engines (RICE) units. These cutting-edge units provide unparalleled flexibility, allowing the plant to swiftly adjust its output by turning on or off in response to real-time power needs. This rapid responsiveness ensures that the grid can seamlessly balance supply and demand, delivering reliable electricity precisely when and where it's needed most. By incorporating these advanced RICE units, the plant not only enhances grid stability but also supports the integration of renewable energy sources, making it a vital asset for a sustainable and resilient energy future.
Where will the plant be located?	The plant will be strategically located in Millard County, Utah, an ideal location for efficiently distributing electricity across both urban and rural areas. This prime location is supported by existing natural gas pipelines and transmission lines, significantly reducing construction times and costs. By leveraging this established infrastructure, we can expedite the plant's development and ensure a swift, cost-effective rollout of reliable power to our growing communities.
How much land will the plant occupy?	The plant will use 20-30 acres for operations and an additional 10-20 acres during construction. This minimal land footprint ensures efficient use of space and minimal environmental disruption. Unlike solar systems that require over 1000 acres for similar energy output, this natural gas plant uses a compact footprint, minimizing environmental impact and preserving land for other community needs.



Why is UAMPS choosing natural gas instead of coal for the Millard County Peaking Plant?	UAMPS is choosing natural gas over coal for the Millard County Peaking Plant for several reasons. Natural gas plants, especially those using Reciprocating Internal Combustion Engines (RICE) units, offer greater flexibility as they can quickly ramp up and down in response to electricity demand, which is crucial for integrating with intermittent renewable energy sources like wind and solar. Natural gas burns cleaner than coal, producing significantly lower emissions of sulfur dioxide, nitrogen oxides, and particulate matter, thereby reducing air pollution and improving overall air quality. These plants are also more likely to meet current and future environmental regulations compared to coal plants, which face increasingly stringent emission standards and potential restrictions. Economically, natural gas plants generally have lower initial capital costs and shorter construction times, making them a more viable option for meeting the growing energy demands of UAMPS member communities.
What measures are taken to ensure clean operations and water conservation?	The plant will use advanced RICE units that are 40% more efficient than older models, significantly reducing nitrogen oxide emissions and contributing to cleaner air and a healthier environment. Additionally, the plant will utilize an air-cooled system that uses less than a million gallons of water annually, equivalent to the consumption of just 12 residential homes, which is vital for conserving water resources.
How quickly can the plant reach full power and what is its efficiency?	The plant's state-of-the-art technology allows it to reach full power in just 2 to 5 minutes, providing dependable energy when needed most. Additionally, the plant is designed to achieve electrical efficiencies exceeding 40%, making it highly efficient for power generation and ensuring good use of fuel resources with minimal environmental impact.
What safety measures will UAMPS take to ensure community safety?	UAMPS is deeply committed to community safety and will implement a comprehensive suite of measures to ensure it. Rigorous inspections will be conducted regularly to maintain the highest standards, while advanced detection technologies will be deployed to quickly identify and address any potential issues. Our comprehensive maintenance programs will ensure the plant operates smoothly and efficiently at all times. Additionally, we will provide thorough training for all staff members, equipping them with the knowledge and skills needed to manage any situation effectively. Our robust emergency response plans will be in place to swiftly and efficiently handle any unexpected events, all while adhering to the strictest regulations.



Why doesn't UAMPS rely solely on renewable energy sources?

UAMPS and its members have developed numerous renewable energy projects like wind and solar for its members. While the costs of wind and solar have dropped, their supplies are inherently intermittent, meaning they do not produce power consistently throughout the day. Solar power depends on sunlight, and wind power depends on wind availability, both of which can be unpredictable, posing significant challenges to maintaining a stable and reliable power supply. Natural gas peaker plants provide a dependable backup that can quickly ramp up to fill in gaps when renewable sources are not producing enough energy. While the cost of renewable energy technologies has decreased, the infrastructure required to store and distribute renewable energy efficiently is still developing. Natural gas plants offer a more immediate and costeffective solution to meet growing energy demands while the renewable infrastructure catches up. Relying on a diverse mix of energy sources, including natural gas, reduces the risk associated with dependency on a single source of energy, ensuring a more resilient and secure energy future capable of withstanding various market and environmental challenges.

What are the economic benefits of the plant, and how does it ensure future readiness?

Peaker plants have lower initial capital costs and shorter construction times, offering an economically viable option without compromising quality. Additionally, RICE generators in peaker plants are capable of burning different fuel types, including renewable natural gas (RNG) and hydrogen, ensuring they remain viable and efficient as energy markets evolve. Investing in a natural gas plant also reduces overreliance on any single energy source, mitigating risks associated with energy supply disruptions and ensuring a more resilient and secure energy future for our communities.