Iron County Data Center

Q&A Response

Water Availability

Q: How much water is proposed for the project and how was that amount determined?

The project requires an estimated annual water demand of 10 to 20 acre-feet for construction activities and 12.75 acre-feet per year for domestic use by approximately 670 employees. For context, one acre-foot is roughly equivalent to the amount of water used by two to three average suburban households in a year. These figures are based on Utah Administrative Rules and specific equipment data provided by manufacturers to ensure accuracy.

Q: How much water is required for the initial fill of the cooling system?

The initial fill for the closed-loop cooling system requires a one-time demand of approximately 8 acre-feet of water. This is a single event rather than a recurring requirement. Because the system is closed-loop, the water is recycled within the facility, which significantly limits the need for ongoing water consumption compared to traditional cooling methods.

Q: Will the project connect to a public water system or develop its own?

The preferred approach for the project is to connect to the Iron County Conservancy District water system, provided that operational capacity is confirmed. If this connection is not feasible, the project may establish a private on-site water system in accordance with Utah state law. Regardless of the method, the project team will coordinate with state agencies to ensure all water use aligns with local groundwater management plans.

Q: Does the project require water rights to support its proposed supply?

Yes, the project must secure or transfer valid water rights to support its chosen water supply option. Documentation of these rights is required before any permits are issued. Any use of groundwater must remain consistent with the administration of the basin by the State Engineer, ensuring the long-term sustainability of local water resources.

Public Safety Planning

Q: Is the on-site fire water storage sufficient for a large data center?

The fire safety plan follows standard industry practices for a facility of this scale. The project will maintain a dedicated water supply for the staffed areas of the building, such as offices and breakrooms. Because water can cause catastrophic damage to electrical components, the data halls utilize "clean-agent" fire suppression systems. These systems use specialized agents to extinguish fires quickly without damaging the sensitive servers.

Q: Are there risks related to nearby infrastructure or geologic features?

The project team engaged a professional engineering firm to evaluate the site for potential risks, including the location of existing pipelines and unique geologic features. This assessment resulted in a detailed map of the property used to determine safe setbacks and the most stable locations for infrastructure. This proactive planning ensures that the facility is built in a manner that respects the physical constraints of the land.

Q: Does the project account for emergency response and fire vehicle access?

The site design includes a looped internal road system, secondary exit routes, and dual access points to ensure emergency vehicles can navigate the property efficiently. These features meet or exceed all applicable fire code requirements for circulation. This layout provides local fire departments with multiple points of entry and the space needed to operate large equipment during an emergency.

Environmental Mitigation

Q: How will air quality impacts and emissions be addressed?

The project is committed to maintaining local air quality and must follow all Utah Division of Air Quality and County regulations. Before construction begins, the project must receive an Approval Order, which is the official state air quality permit. This permit dictates the exact equipment used and the emission controls required. The project team is legally obligated to monitor these systems and report data to the state regularly.

Q: Will operational noise from the facility comply with County standards?

Professional noise modeling has been completed to predict the sound levels generated by the facility. The results indicate that the project can meet all County noise limits through specific design controls. These measures include the use of acoustic enclosures for equipment, sound-dampening barriers, and the strategic placement of noise-generating components away from the property boundaries.

Q: How will lighting impacts and dark sky concerns be mitigated?

The project will mitigate lighting impacts by using shielded fixtures that direct light downward toward the ground. These measures are designed to reduce off-site "glow" and maintain the visual character of the night sky. By following these dark sky principles, the facility will remain compatible with the surrounding landscape while providing necessary safety lighting for employees.

Q: Will the project impact wildlife habitat or movement corridors?

The project team conducted a thorough study of the local environment to ensure the facility does not block important wildlife paths. The team is working with resource agencies to ensure construction does not interfere with seasonal migrations. Because neighboring solar farms and manufacturers already operate within these pronghorn antelope habitats, the project is adopting similar "wildlife-conscious" designs to support continued animal movement.

Land and Traffic Management

Q: Is the project located in a wildfire risk area?

The project site is located within a mapped high wildfire risk zone. To address this concern, the project incorporates risk-reduction measures, such as a minimum 100-foot fuel management buffer. This defensible space involves removing excess vegetation and dry brush around the facility to create a safety zone that protects the building and limits the spread of fire.

Q: How are hazardous materials and potential spills addressed?

Hazardous materials will be managed through a formal Spill Prevention, Control, and Countermeasure plan. This plan requires the use of secondary containment systems, which act as a backup to catch any leaks, along with controlled fueling areas and routine inspections. Contractors are also subject to strict oversight to ensure that any materials used during construction are handled safely.

Q: How will construction and operational traffic affect local roads?

To address road congestion and safety, the project team will perform several roadway upgrades based on a formal Traffic Impact Study. These improvements include paving Antelope Springs Road, widening lanes, and flattening sharp curves to improve visibility for all drivers. These enhancements are designed to handle the increased flow of vehicles and make the area safer for the entire community.

Q: Is the nearby railroad crossing a traffic safety concern?

Modeling indicated potential traffic backups near the railroad crossing under certain conditions. To resolve this, the project includes intersection improvements, such as realigning the junction of Iron Springs Road and Antelope Springs Road. The addition of a dedicated left-turn lane will also help keep traffic moving and reduce the risk of vehicles queuing across the tracks.

Economic and Utility Impact

Q: How many permanent jobs are expected from the project?

Once the facility is fully operational, it is expected to support approximately 1,800 permanent full-time equivalent positions within Iron County. This total includes 670 direct jobs located on-site at the facility. These positions offer a range of opportunities in fields such as information technology, power engineering, facility management, security, and administration.

Q: Will the project increase electricity costs for local residents?

The project plans to use on-site natural gas power generation to meet its primary operational needs. By producing its own electricity, the facility avoids drawing heavily from the local utility grid. This independent approach is intended to prevent an increase in demand that could drive up electricity costs for local residents and businesses.