FORM R: H35 HYDROGEN FUELING SYSTEM TECHNICAL SPECIFICATIONS

The Design-Builder shall provide their technical performance specifications for the proposed Hydrogen Fueling Station in the table shown below. Design-Builder shall consider all responses herein as binding. Responses provided shall be utilized as the basis for Operational Performance Testing.

|  |  |  |
| --- | --- | --- |
| **Equipment/Parameter** | **Units** | **Specifications** |
| Estimated Electrical Load | A | includes H35 and H70 fueling equipment |
| Service Power Size | A |  |
| Backup Generator - Fuel and Rating | kW |  |
| Liquid Hydrogen Storage Tank Capacity | kg |  |
| Liquid Hydrogen Storage Tank Usable Capacity | kg |  |
| Max. Time to Offload 4000 kg into LH2 tank | minutes |  |
| Minimum Tank Pressure for Pump Operation | psig |  |
| Maximum Operating Pressure in LH2 Tank | psig | vent regulator setting |
| Maximum Fuel Losses at Various Usage Rates: |  | assume all fueling over a 3-hr period |
| 250 kg/day | kg/day |  |
| 650 kg/day | kg/day |  |
| 800 kg/day | kg/day |  |
| Pumps | # | make/number |
| Pump Flow Rate | kg/hr |  |
| Type of Gas Storage Configuration |  | single buffer or cascade storage description |
| Gas Storage Capacity | kg | per bank |
| Gas Storage Pressure | bar/MPa | per bank |
| Gas Cooling System |  | type and capacity |
| Hydrogen Dispenser | # | Two (2) in-yard dispensers |
| Dispenser Accuracy (kg dispensed) | % accuracy | (+/- 3% or better) |
| Hydrogen Dispensing Pressure | bar/MPa |  |
| Hydrogen Nozzle |  | WEH TK16 HF |
| Infrared Communications/Grounding |  | nozzle Interface with TN1 HF receptacle |
| Fueling Time per Bus (56 kg capacity) | minutes | 6 to 10 minutes from time of starting fueling until fueling is complete |
| Fills per Hour | # |  |
| Electrical Power Service Size | Amps/Volts |  |
| Electrical Power Load Approximate | FLA and kW |  |
| Data Networking Service Requirement | Mbps |  |
| Station Reliability as Designed | % Uptime |  |