

TEMPERATURE RANGE FOR SCR PERMISSIVE FOR INJECTION OF AMMONIA FOR IGS RICE PROJECT

The temperature sensor(s) used for aqueous ammonia injection to the SCR(s) are in the range of 536 degree Fahrenheit to 572 degree Fahrenheit. These temperature(s) are measured by the temperature sensor(s) that are located after or downstream from the SCR catalyst(s).

Table 1 indicates that the SCR catalyst will be in-service at engine loads of 25 percent and greater. According to the manufacture of the engine(s), when a cold start is initiated the SCR is typically in-service within 15 minutes of initiating the start. Based on this information the SCR ammonia injection system will be in-service at all loads shown in Table 1.

All values in Table 1 are after the catalyst system. Exhaust gas flows and temperatures provided below are based on ambient conditions. i.e. – ambient temperature 90°F, relative humidity 9%, and altitude 2,630 feet.

TABLE 1

Engine load (%)	Exhaust gas temperature (°F+/-15°C)	NOx emissions as NO₂, lb/h
100	672	1.5
75	728	1.29
50	801	1.21
25	807	0.85