From:	Bumar, Rich
To:	"Melanie King"
Cc:	Lee Page; Costello, Martin; Garrido, Jose R.; Rodriguez, Armando; Azevedo, Dan; Schmudde, Lee
Subject:	Walt Disney World Diesel Generators
Date:	Friday, September 28, 2012 2:56:47 PM

September 28, 2012

Ms. Melanie King
Energy Strategies Group
Sector Policies and Programs Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Mail Code D243-01
RTP, NC 27711
RE: Walt Disney World
Diesel Generator Emergency Reclassification under RICE

Dear Ms. King:

This letter is a follow-up to our conversations yesterday and this morning regarding reclassifying the status of a set of diesel generators that serve a computer data center ("DISC") facility located at the Walt Disney World Resort complex ("WDW"). Specifically we would like to get EPA's agreement on what would be considered an "emergency" at the DISC facility. DISC is a critical data center for the Walt Disney Company; even short downtimes at the facility could result in losses in revenue of millions of dollars.

The generators at DISC, installed in 2003, are currently permitted as general use generators and are limited by permit to 225,000 gallons of #2 diesel fuel per year of fuel consumption. This limit is based on the 40 ton per year PSD threshold for NOx. We accepted that fuel limit to avoid PSD- burning 225,000 gallons of fuel would emit 39 tons of NOx, based on an emissions factor determined during a stack test conducted when the generators were originally permitted. The decision was made to permit the generators as we did because we wanted more operational flexibility than emergency generator classification would allow (by our understanding at the time of the strictest definition of what constitutes an "emergency"), but their primary purpose is to provide emergency power to the DISC facility. They serve only the DISC facility and, without extensive modifications to the electrical switchgear, the power cannot be routed to the general electrical grid for the resort. Peak shaving or grid demand response is also not an option with these units.

WDW is a major source of HAPS, which are emitted mainly from architectural and maintenance painting operations at the facility, and we are a Title V facility. We are currently in the process of renewing the Title V permit.

Since the WDW Title V permit is up for renewal, we are exploring the option to reclassify the generators as emergency generators, mainly due to the costly compliance requirements of the RICE MACT rule. If reclassified as emergency generators, we understand that the operation of each engine would be limited in non-emergencies to a maximum of 50 hours per year of maintenance and readiness testing operation and a maximum of 50 hours per year of operation for any general purpose, and that actual

emergency operation is not limited under the rule. Also, detailed records would be required under the RICE rule for emergency generators to be kept to document the operation. If we choose to keep the generators at the current classification, emission controls and monitors will be required, at an estimated total cost of between $500,000 and $1,000,000.

The DISC facility requires a high quality power supply ("conditioned power") to ensure that the computers are not affected by spikes in voltage or by changes in the waveform or frequency of the electrical power. Conditioned power is supplied to DISC by routing all external grid power through the facility's uninterruptable power supply (UPS). Electrical power supplied by the diesel generators are routed through a separate power conditioning system. Facility electrical power supply reliability is achieved through what is referred to as "N+1 redundancy". Normal N+1 redundancy consists of external grid power plus UPS. (Please note that no "preemptive operation" of generators is used when bad weather is in the area. That option had been discussed in the past but upon further investigation, that is not a scenario that triggers going to generator power.) If either of the redundancies go down, the generators are brought online to bring the power supply back to N+1. That would be the most expected emergency scenario. There are only a few other scenarios in which N+1 redundancy would be compromised, requiring use of the generators. The following list summarizes all scenarios in which the generators would be deployed:

- loss of external power (including grid feed switchgear), as described above
- loss of UPS from unexpected incident or maintenance
- loss of the facility's paralleling switch gear and/or main distribution switchboard

Grid power may be available (notwithstanding the loss of switchgear which prevents the power feed from reaching the facility) during some of these scenarios, such as loss of UPS, or loss of internal switching or distribution equipment, but we classify these situations as emergencies and go to generator power under the N+1 plan and because of the conditioned power needs. Since grid power could be available under some of these scenarios, we were reluctant to move forward with reclassification without consulting with your office at the EPA. We are asking for agreement that the scenarios we have presented in above list could be considered "emergencies" and therefore those hours of operation would not count towards the 50-hour general purpose operational limit.

If you have any questions or comments, please contact me by email at rich.bumar@disney.com or at (407) 390-5003.

Sincerely,

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