

**From:** Kim, James  
**Sent:** Tuesday, July 23, 2013 8:36 AM  
**To:** William D Bartron (william.d.bartron@dom.com)  
**Cc:** Thomas G Cleary (thomas.g.cleary@dom.com); Mohamed A Elmaghrabi (mohamed.a.elmaghrabi@dom.com)  
**Subject:** FW: NEW RAI FOR MILLSTONE 2

Bill,

The NRC tech staff wants to get a response ASAP to a new RAI generated in response to MPS2 response letter dated July 19, 2013.

The RAI is shown below.

Thanks,  
Jim Kim

## EMERGENCY DIESEL GENERATOR RAI

### Background

The licensee has provided a response to RAI-3 of NRC letter dated July 18, 2013 in a letter dated July 19, 2013. RAI 3 was submitted regarding design operational limits of the emergency diesel generators (EDG).

### Issues

- A) Each EDG is cooled by 3 heat exchangers in series on the Service Water (SW) side. The licensee has stated that the first cooler in series, i.e. the intercooler (X-83A or B) for each EDG, is the controlling component, meaning that if the cooling requirements of the intercooler is met than the cooling requirements other heat exchangers, i.e. the lube oil cooler and the jacket water cooler, are met.
- B) The vendor data sheet for the intercooler specifies greater heat exchange requirements and SW flow requirements than what the licensee has stated in their response to RAI-3. For an EDG load of 2750 KW and seawater (SW) temperature of 75°F the differences are stated in the table below:

	<b>Vendor Data Sheet</b>	<b>RAI 3 Response</b>
Intercooler heat load at 2750KW	2,769,000 BTU/HR	2,067,000 BTU/HR
Seawater flow rate	700 GPM	507 GPM

### Request

- 1) Please explain fully in detail and prove the statement that the intercooler (X-83A or B) for each EDG is the controlling component, meaning that if the cooling requirements of the intercooler is met than the cooling requirements other heat exchangers, i.e. the lube oil cooler and the jacket water cooler, are met.

- 2) Explain and justify the differences in vendor requirements and the response to RAI 3, as listed in the table above.