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November 1, 2013

Via Electronic Mail
And U.S. Mail

James E. Belsky, BWP Permit Chief
MassDEP, Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Re: Comments on Proposed Air Quality Plan Approval
And Draft Prevention of Significant Deterioration Permit
Salem Harbor Redevelopment Project (the "Project")
Transmittal Number X254064

Dear Mr. Belsky:

On behalf of Footprint Power Salem Harbor Redevelopment LP (the "Applicant"), I am pleased to submit the following comments regarding the Proposed Air Quality Plan Approval and Draft Prevention of Significant Deterioration (PSD) Permit dated September 9, 2013.

Throughout the development and permitting processes, the Applicant has strived to ensure that the proposed Project will result in a state of the art facility that provides both needed electric generation capacity as well as important environmental benefits. Indeed, the Applicant has been engaging in continuing discussions with its equipment vendors to ensure that these goals are achieved. As a result of these discussions, the Applicant can now report that it has obtained revised, *lower* particulate matter emission guarantees from its turbine vendor General Electric Company (GE). Please note that nothing has changed in the physical configuration or operations of the equipment; rather, the reductions described in this letter result from the supplier's willingness to offer more stringent guarantees.

Specifically, GE will now guarantee filterable plus condensable particulate stack emissions for operating loads greater than MECL at: 8.8 pounds per hour/unit for no duct firing; and 13.0 pounds per hour for duct firing. (The current draft permit limit in lb/hr for both unfired and duct fired conditions is 15.5 lb/hr.) This, in turn, results in a reduced emissions limit for the proposed Project's maximum lb/MMBtu of PM/PM10/PM2.5 for all unfired conditions above MECL of 0.0071 lb/MMBtu (reduced from 0.0088), and for duct fired conditions above MECL of 0.0062 lb/MMBtu (reduced from 0.0067 lb/MMBtu). Likewise, at full load unfired conditions, the Project's PM/PM10/PM2.5 emissions now range from 0.0038 lb/MMBtu at 0 °F to 0.0047 lb/MMBtu at 105 °F. Furthermore, at full load unfired conditions the Project's

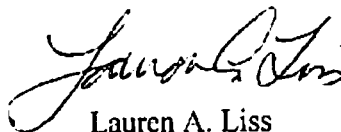
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Page 2

PM/PM10/PM2.5 will be 0.029 (reduced from 0.044) and with duct firing 0.041 (reduced from 0.049). Finally, the PM/PM10/PM2.5 maximum facility potential to emit in tons per year (TPY) will be 82.0 TPY (reduced from 109.4 TPY). This results in a 25% reduction in potential to emit particulate matter.

The facility maximum ambient impacts remain based on our prior more conservative particulate emissions

Accordingly, the Applicant requests that the final air plan approval and PSD permit reflect the reductions in particulate matter emissions described above. Attached to this letter are proposed revised, red-lined versions of Table 7 from the Proposed Air Quality Plan Approval and Table 2 from the Draft PSD Permit showing these reductions.

Sincerely,



Lauren A. Liss

LAL/dm

cc: Mr. Scott G. Silverstein
Mr. Edward J. Braczyk, Environmental Engineer
Mr. Cosmo Buttaro, Environmental Engineer
Mr. Keith H. Kennedy
Mr. George S. Lipka

Table 2			
EU#	Operational/Production Limit	Air Contaminant	Emission Limit
EU1, EU2	Operation at \geq MECL, ⁽¹⁾ excluding start-ups and shutdowns Fuel Heat Input Rate of each EU: \leq 2,449 MMBtu per hour, HHV Natural Gas shall be the only fuel of use. Fuel Heat Input of each EU: \leq 18,888,480 MMBtu, HHV per 12-month rolling period ⁽⁹⁾	VOC (no duct firing), as Methane (CH ₄)	\leq 3.0 lb/hr ^(1,2) \leq 0.0013 lb/MMBtu ⁽¹⁾ \leq 1.0 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.009 lb/MW-hr ^(1,2,10,14)
		VOC (duct firing), as Methane (CH ₄)	\leq 5.4 lb/hr ^(1,2) \leq 0.0022 lb/MMBtu ⁽¹⁾ \leq 1.7 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.016 lb/MW-hr ^(1,2,15)
		S in Fuel	\leq 0.5 grains/100 scf
		SO ₂ (no duct firing)	\leq 3.7 lb/hr ^(1,2) \leq 0.0015 lb/MMBtu ⁽¹⁾ \leq 0.3 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.010 lb/MW-hr ^(1,2,10,14)
		SO ₂ (duct firing)	\leq 3.7 lb/hr ^(1,2) \leq 0.0015 lb/MMBtu ⁽¹⁾ \leq 0.3 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.011 lb/MW-hr ^(1,2,15)
		H ₂ SO ₄ (no duct firing)	\leq 2.3 lb/hr ^(1,2) \leq 0.0010 lb/MMBtu ⁽¹⁾ \leq 0.1 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.007 lb/MW-hr ^(1,2,10,14)
		H ₂ SO ₄ (duct firing)	\leq 2.3 lb/hr ^(1,2) \leq 0.0010 lb/MMBtu ⁽¹⁾ \leq 0.1 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.008 lb/MW-hr ^(1,2,15)
		PM/PM ₁₀ /PM _{2.5} (no duct firing)	\leq 15.58.8 lb/hr ^(1,2,8) \leq 0.0088-0071 lb/MMBtu ^(1,8) \leq 0.044-029 lb/MW-hr ^(1,2,8,10,14)
		PM/PM ₁₀ /PM _{2.5} (duct firing)	\leq 15.513.0 lb/hr ^(1,2,8) \leq 0.0067-0062 lb/MMBtu ^(1,8) \leq 0.049-041 lb/MW-hr ^(1,2,8,15)
		NH ₃ (no duct firing)	\leq 6.6 lb/hr ^(1,2) \leq 0.0027 lb/MMBtu ⁽¹⁾ \leq 2.0 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.019 lb/MW-hr ^(1,2,10,14)
		NH ₃ (duct firing)	\leq 6.6 lb/hr ^(1,2) \leq 0.0027 lb/MMBtu ⁽¹⁾ \leq 2.0 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.020 lb/MW-hr ^(1,2,15)
		Greenhouse Gases, CO _{2e}	\leq 825 lb/MW-hr ⁽¹¹⁾ \leq 895 lb/MW-hr ⁽¹⁶⁾

Table 2				
EU#	Operational/Production Limit	Air Contaminant	Emission Limit	
EU5	≤ 300 hours of operation per 12-month rolling period Ultra Low Sulfur Diesel Fuel Oil shall be the only fuel of use.	NO _x and VOC (NMHC as CH _{1.8}), Combined Total	≤ 2.44 lb/hr ⁽⁶⁾ ≤ 3.0 gm/bhp-hr ⁽⁶⁾ ≤ 4.0 gm/KW-hr ⁽⁶⁾	
		CO	≤ 2.14 lb/hr ⁽⁶⁾ ≤ 2.6 gm/bhp-hr ⁽⁶⁾ ≤ 3.5 gm/KW-hr ⁽⁶⁾	
		S in Fuel	≤ 0.0015% by weight	
	≤ 300 hours of operation per 12-month rolling period Ultra Low Sulfur Diesel Fuel Oil shall be the only fuel of use.	SO ₂	≤ 0.004 lb/hr ⁽⁶⁾	
		H ₂ SO ₄	≤ 0.0003 lb/hr ⁽⁶⁾	
		PM/PM ₁₀ /PM _{2.5}	≤ 0.12 lb/hr ⁽⁶⁾ ≤ 0.15 gm/bhp-hr ⁽⁶⁾ ≤ 0.2 gm/KW-hr ⁽⁶⁾	
		Greenhouse Gases, CO _{2e}	≤ 162.85 lb/MMBtu	
			Opacity	< 5%, except 5% to < 10% for < 2 minutes during any one hour
	EU1, EU2, EU3, EU4, EU5	NA	Smoke	310 CMR 7.06 (1)(a)
	Facility-Wide	NA	NO _x	≤ 144.8 TPY ⁽⁷⁾
CO			≤ 106.4 TPY ⁽⁷⁾	
VOC			≤ 28.0 TPY ⁽⁷⁾	
SO ₂			≤ 28.8 TPY ⁽⁷⁾	
PM/PM ₁₀ /PM _{2.5}			≤ 109,482.0 TPY ^(7,8)	
NH ₃			≤ 51.0 TPY ⁽⁷⁾	
H ₂ SO ₄			≤ 18.8 TPY ⁽⁷⁾	
Pb			≤ 0.00013 TPY ⁽⁷⁾	
Formaldehyde or Single HAP			≤ 6.6 TPY ⁽⁷⁾	
Total HAPs			≤ 13.1 TPY ⁽⁷⁾	
	CO ₂	≤ 2,277,333 TPY ⁽⁷⁾		
	Greenhouse Gases, CO _{2e}	≤ 2,279,530 TPY ⁽⁷⁾		

Table 2 Notes:

1. Emission limits are one hour block averages and do not apply during start-ups and shutdowns.
2. Emission rates are based on burning natural gas in any one combustion turbine at a maximum natural gas firing rate of 2,449 MMBtu/hr, HHV, at 90 °F ambient temperature, 14.7 psia ambient pressure, and 60% ambient relative humidity (combustion turbine and duct burner combined). These constitute worst case emissions.
3. Start-ups include the time from flame-on in the combustor (after a period of downtime) until the minimum emissions compliance load (MECL) is reached. Shutdowns include the time from dropping below the MECL until flame-out.
4. Emission limits represent worst case emissions for cold start-ups. Emissions for warm and hot start-ups are

Table 7			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
EU1, EU2	<p>Operation at \geq MECL, ⁽¹⁷⁾ excluding start-ups and shutdowns</p> <p>Fuel Heat Input Rate of each EU: \leq 2,449 MMBtu per hour, HHV</p> <p>Natural Gas shall be the only fuel of use.</p> <p>Fuel Heat Input of each EU: \leq 18,888,480 MMBtu, HHV per 12-month rolling period ⁽⁹⁾</p>	VOC (no duct firing), as Methane (CH ₄)	\leq 3.0 lb/hr ^(1, 2) \leq 0.0013 lb/MMBtu ⁽¹⁾ \leq 1.0 ppmvd @ 15% O ₂ ⁽¹⁾ \leq 0.009 lb/MW-hr ^(1, 2, 10, 14)
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