1 Q. Please provide a schedule showing costs associated with all capital projects 2 undertaken at the Holyrood Thermal Generating Station from 2003 through 3 2005 and forecast to be undertaken in 2006 and 2007. For each such 4 project, please describe whether there were anticipated to be any operations 5 and maintenance savings related to improved fuel efficiency or station 6 service as a result of the project; the amount of such savings; and where 7 these savings are reflected in the operations and maintenance forecasts for 8 the 2007 test year. 9 10 11 Α. A schedule showing the costs associated with capital projects undertaken at 12 the Holyrood Thermal Station from 2003 through 2005 and forecast to be 13 undertaken in 2006 and 2007 is on page 3. The impact of the 2003 projects 14 has already been reflected in the increase to 630 kWh/bbl in Order No. P.U. 15 14 (2004). 16 17 Three projects result in fuel efficiency or station service savings. The project 18 "Purchase Auxiliary Cooling Water Pump" was forecast to result in a 19 reduction in station service load when Unit 3 is operating as a synchronous 20 condenser. These savings were estimated at \$29,000 per year. "Turbine & 21 Generator Upgrade Unit 3" is estimated to reduce fuel expense by \$167,000 22 annually and "Air Preheater Steam Condenser Pumps - Unit 3" is forecast to 23 reduce fuel consumption by approximately \$160,000 per year. 24 25 With the exception of "Purchase Auxiliary Cooling Water Pump", these 26 projects do not result in savings in operating and maintenance expenses but 27 a reduction in the quantity of fuel consumed at Holyrood. "Purchase

Auxiliary Cooling Water Pump" will not result in operating and maintenance

28

IC 136 NLH 2006 NLH General Rate Application

- Page 2 of 3 savings in 2007 since Unit 3 is scheduled for a major overhaul in 2007 and 1
- 2 the unit will not be operating in synchronous condenser mode.

Holyrood Thermal Plant List of Capital Projects \$(000)

	Actual 2003	Actual 2004	Actual 2005	Forecast 2006	Proposed 2007
Purchase and Install Continuous Emission Monitoring	684				
Rep. Turbine Electrohydraulic Control Syst - Unit No.1	980				
Purchase and Installation of a Neutralization Pit	177				
Purchase Mobile Ambient Monitoring System	172				
Flue Gas Particulate Removal Study	59				
Purch/Inst Partial Discharge Analysis Equip - Unit No. 1	120				
Upgrade Civil Structures	1,951	8	2,009		
Purchase Auxiliary Cooling Water Pump	36				
Upgrade Control System		1,499	1,016	316	
Purch/Inst Ambient Monitoring System Enhancement		716			
Holyrood Marine Terminal - Security Upgrade		436			
Purchase Condensor Easi Drive Mechanism-Units 1&2		18			
Purch/Inst Anti-Fouling System for Cooling Water Systems			527		
Purch/Inst Fire Protection System - Microwave Radio Room			55		
Disconnecting Means to 600 Volt MCC Branch Feeders			356	1,116	750
Replace Diesel Generator			180		
Fire Protection Upgrades				369	1,456
Replace Warm Air Make-Up Units Steam Coil				602	
HVAC Replacements - Relay, Control & Exciter Rms				565	
Replace Superheater Unit 2				319	2,818
Study of Regeneration Waste Treatment				172	
Modify Boiler Protection and Control				117	
Replace Paging System				275	
Life Extension					3,335
Turbine & Generator Upgrade Unit 3					1,654
Contaminated Water Treatment					276
UPS Battery Monitoring Program					79
Air Preheater Steam Condenser Pumps - Unit 3					599
Purchase & Replace Tools & Equipment Less than \$50,000	71	40	25	57	42
Total Thermal Plant	4,250	2,717	4,168	3,908	11,009