[Company Exhibit 3]

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for authority to modify certain accounting practices and for tariff approvals.	))))))	**Case No. 07-1003-EL-ATA**

DIRECT TESTIMONY OF

ROBERT J. BORLAND

ON BEHALF OF

OHIO EDISON COMPANY
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
THE TOLEDO EDISON COMPANY

Q. PLEASE STATE YOUR NAME AND DESCRIBE YOUR POSITION AT FIRSTENERGY.

A. My name is Robert J. Borland. I am the Manager of Nuclear Fuel & Analysis for the FirstEnergy Nuclear Operating Company (FENOC).

Q. PLEASE DESCRIBE YOUR BACKGROUND IN NUCLEAR FUEL.

A. I have a BS and MS in nuclear engineering from Iowa State University. I worked for 3 years at Consumers Power Company as a core design engineer before joining Toledo Edison in 1985. I performed mainly core design and reactor physics support activities at Davis-Besse from 1985 to 1999, and also was project manager for power uprate projects in the late 1990's. I headed the team that prepared the Request for Proposal for Davis-Besse nuclear fuel fabrication, evaluated the resulting bids, and obtained approval of the final award in 1997. I was promoted to Supervisor of Core Design & Physics Support for all FENOC plants (Beaver Valley, Davis-Besse, and Perry) in 2000. I was then promoted to Manager, Nuclear Fuel & Analysis in 2004. I am a registered Professional Engineer in the State of Ohio.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am testifying regarding FENOC's nuclear fuel costs described in the adjustment for 2008 and how those costs may have changed from the year 2002. I will also describe the nuclear fuel manufacturing and cost accounting process.

Q. PLEASE DESCRIBE HOW NUCLEAR FUEL IS MINED AND CONSUMED.

A. Uranium ore is the raw material that is mined from the ground and milled to separate the uranium from the non-usable portion of the ore. The milled product is triuranium octoxide (U_3O_8), also known as uranium oxide, and otherwise referred to as "yellowcake" due to its somewhat yellowish color. Unlike fossil fuel, nuclear fuel is a manufactured product that has several stages of production that must happen before the uranium is usable. The nuclear fuel cycle begins with the mined ore, which is then milled, resulting in U_3O_8 in a powdered form. Natural U_3O_8 consists of about 0.711% by weight of the fissile isotope uranium-235, with the remainder in the form of uranium-238, which does not support the nuclear fission process as readily as uranium-235.

In separate conversion facilities, yellowcake is converted into uranium hexafloride (UF_6) gas. This gas is the feed material currently required for the enrichment process needed to produce fuel for a reactor.

The process of separating uranium-235 from uranium-238 is called enrichment. The converted natural uranium, in the form of UF_6 gas, is delivered to enrichment facilities where the uranium-235 content is increased from 0.711% to up to 5% using a gaseous diffusion or centrifuge process. The resulting material is referred to as enriched uranium product (EUP).

The EUP, still in the form of UF_6 gas, is delivered to a fabrication facility where the fuel assemblies are manufactured. These fabricators convert the EUP to uranium dioxide (UO_2) powder that is subsequently pressed and sintered into the shape of a fuel pellet, which is about length and diameter of a pencil eraser. The pellet is a ceramic material that has a high melting point to enable it to withstand the temperatures in the reactor. The pellets are stacked inside long sealed tubes, called fuel rods, that are seated next to one another in various sized arrays. The fuel rods are held together by end fittings (tie plates) and other fixtures to form fuel assemblies or fuel bundles.

Fuel assemblies are the final products of this process. About 40% of the fuel assemblies in the reactor are removed and replaced with new assemblies while the plant is shutdown during a refueling outage. The removed spent fuel assemblies are temporarily stored on site until final disposition is available at a federal repository.

Since only about 40% of the assemblies are replaced in a refueling outage, the new fuel assemblies remain in the core typically for two or three fuel cycles. A cycle begins when new fuel is inserted into the reactor and ends eighteen or twenty-four months later when a batch of spent fuel assemblies is removed and replaced with new fuel assemblies to begin the next cycle.

Q. HOW DO THESE PROCESSES CONTRIBUTE TO THE COST OF NUCLEAR FUEL?

A. Nuclear fuel management is the practice of optimizing the amount of energy that is extracted from the fuel over a sustained period of time for the least amount of dollars while maintaining adequate safety margins. Nuclear fuel costs are accumulated (capitalized) as the fuel transitions from ore in the ground through its usable life in the reactor, and to the final disposition of spent fuel as high level radioactive waste.

The direct costs include the basic costs for U_3O_8, conversion services to UF_6, enrichment services, and fabrication costs. Carrying costs for capitalized projects are also accumulated during the manufacturing process (in-process fuel) until the fuel is delivered to the nuclear power plant. After the nuclear generating unit starts up following the refueling operation, the accumulated or capitalized costs are then considered in service and are amortized or expensed over the life of the fuel. The life of the fuel is based upon the expected energy contained in the fuel.

Q. IN ADDITION TO THE AMORTIZATION OF THE DIRECT COSTS OF MANUFACTURING THE FUEL AND CARRYING COSTS DESCRIBED ABOVE, WHAT OTHER COSTS ARE DIRECTLY ASSOCIATED WITH THE NUCLEAR FUEL?

A. Other costs include high-level waste disposal fees paid to the Department of Energy (DOE), engineering design services, decontamination and decommissioning (D&D) fees assessed by DOE (which ended in October 2007), property taxes and in-core (in service) interest charges.

Q. ARE THESE COSTS, WHICH YOU HAVE DESCRIBED, INCLUDED IN THE BASE YEAR 2002 FUEL COST?

A. Yes.

Q. PLEASE DESCRIBE HOW THE COSTS IN THE BASE YEAR 2002 COMPARE TO THE COSTS INCLUDED FOR THE ADJUSTMENT YEAR

OF 2008, AND EXPLAIN WHY THE COSTS HAVE CHANGED, IF APPLICABLE.

A. The amortization of the direct cost for manufacturing the fuel and carrying costs for 2008 increased by approximately $33,092,676 from the 2002 base year. This increase is directly related to an increase in generation in megawatt-hours (MWhs) from the nuclear generating units for 2008 relative to 2002 coupled with an increase in the direct cost of manufacturing the fuel. Since the nuclear units generated more energy in 2008 and the fuel was more expensive, more fuel was depleted in the reactor, and more dollars were amortized or expensed. The amortized direct fuel cost per unit generation ($/MWh) has increased from $3.22 per MWh in 2002 to about $3.47 per MWh for 2008. Note that these numbers include only the direct cost to manufacture the fuel and carrying costs.

Disposal fees increased by about $7,416,170, and these are also directly related to the higher nuclear unit generation. The high-level waste disposal fee paid to DOE is established by contract at $1.00 per MWh adjusted downward for system losses. Higher generation results in more dollars paid to DOE in accordance with the disposal contract

Pre-1983 disposal costs increased by approximately $136,350 compared to 2002. The pre-1983 disposal costs represent the interest charges on the disposal payment due to DOE for high level waste discharged from the Davis-Besse plant prior to 1983. These interest payments are also capitalized along with the principle amount owed to DOE, and this increases future interest payments. The DOE interest rate is also increasing, which increases the payment in the 2008 adjustment year.

In-core, or in-service interest, is the calculated amount of interest charged at short term rates to fund the capitalized nuclear fuel. The in-core interest is directly related to the average monthly net fuel in-service capitalized balance. The in-service interest charges increased by approximately $1,733,018 when compared to base year 2002 actual calculated interest. The increase is due to a rise in interest rates from about 2.5% in 2002 to about 3.25% in 2008. The increase is also caused by an increase in the total capitalized cost as new fuel is loaded into the reactor during refueling.

Property taxes on nuclear fuel are based upon the value of the in-service fuel at the plants located in Ohio (Perry and Davis-Besse) as of December 31 of each calendar year. The tax due is calculated utilizing the established tax rate for the county where the plant resides and the tax assessment rate of 25%. The assessment rate remains unchanged while the tax rates and the value of the in-service fuel are slightly higher from 2002. Property tax increased about $811,124.

Support services are engineering analyses and design support provided by the fuel fabricator as part of the fuel fabrication process. Without these engineering analyses, the new fuel cannot be used in the reactor. Support services payments vary with the number of new fuel batches used in the refueling each year. The support services increased by approximately $421,989 when compared to the 2002 base year.

Q. ARE THERE ANY OTHER COST CATEGORIES INCLUDED IN THE BASE YEAR 2002 FUEL COST?

A. Yes. The cost of fuel oil used in the operation of the plant emergency diesel generators at Perry and Davis-Besse is also included. This cost increased by about

$218,995 in 2008. The increase was mostly the result of higher oil prices, and to a lesser degree, increased usage.

Q. HOW HAVE MARKET PRICES FOR NUCLEAR FUEL CHANGED SINCE THE BASE YEAR 2002?

A. In 2002 the spot price for uranium, in the form of U_3O_8, was about $10.00/lb; the price of uranium increased at a slow rate until 2007 when the spot price of uranium spiked to $136.00/lb. In 2008 the spot price of uranium fluctuated between $95.00/lb and $45.00/lb, while the long term price dropped over the year from $95.00/lb to $70.00/lb. Natural uranium production has not kept pace with an increasing demand over the past several years, and this has depleted inventories that were built up in the past.

Conversion services (U_3O_8 to UF_6) have also increased in price. In 2002 the price for conversion services was $4.00/kg. In 2008 the spot price for conversion services fluctuated between $8.00 and $10.00/kg while the long term price was stable at $12.25/kg.

Q. WHAT ABOUT THE OTHER ITEMS THAT MAKE UP THE FUEL COST?

A. Pricing for enrichment services has been gradually increasing in recent years. The long term price of enrichment services was around $105.00/SWU in 2002. In 2008 the long term price of enrichment services increased throughout the year from $146.00/SWU to around $160.00/SWU.

Fabrication prices have also been relatively steady with increases in line with the rate of inflation.

Q. ARE NUCLEAR FUEL COSTS SUSCEPTIBLE TO MARKET FLUCTUATIONS?

A. Yes. While a well-diversified portfolio minimizes the risk due to market conditions or non-delivery of goods, nuclear fuel costs remain subject to market fluctuations. Some of the contracts that are in place today are either base escalated or have price ceilings that limit the effects of market volatility. Nuclear Fuel & Analysis has also exercised contract flexibility and options to reduce exposure to the market while there has been an increasing price trend. Ultimately, these influences are reflected in the cost of each reload, which is amortized over the useful life of the fuel assembly that is designed to remain in the reactor for three cycles. The lifetime of a fuel assembly typically is about 3 to 6 years. FENOC requirements for nuclear fuel materials and services are essentially covered under current contracts with attractive prices, relative to the current market, through about 2011.

Q. HOW ARE THE YEAR 2008 NUCLEAR FUEL COSTS DETERMINED?

A. Nuclear Fuel & Analysis performs this function using a standard computer forecasting model that is widely used in the US nuclear industry. Inputs to the model include plant generation forecasts, nuclear characteristics of each reload fuel batch, along with the costs associated with each reload. Reload cost is determined by providing all of the contract information to date, including inventory levels, quantities under contract, delivery schedules, allocations, and pricing variables such as inflation rates, limits and escalation rates. The model prepares reports to show future reload costs, expense by the year, and future finance requirements.

Q. WHAT IS THE TOTAL NUCLEAR FUEL COST AMOUNT, IN DOLLARS, FOR 2002 AND 2008?

A. The total fuel cost in the year 2002 is $110,333,798. The total fuel cost for the year 2008 is $154,084,322. The difference is $43,750,524.

Q. HOW DOES THE FENOC NUCLEAR FUEL COST COMPARE WITH OTHER UTILITIES IN THE INDUSTRY?

A. The benchmark that Nuclear Fuel & Analysis uses is the Electrical Utility Cost Group (EUCG) Index. This is the same benchmark used by most U.S. utilities. The EUCG Fuel Cost Index ($/MWh) includes the major components of actual fuel cost for a given year. The index includes uranium, conversion, enrichment, fabrication, engineering services, disposal, and cost of capital. Participants in the EUCG are grouped into four quartiles. The first, or top, quartile has the lowest costs in the index; the fourth, or last, quartile has the highest costs. FENOC was in the second quartile in 2002 and was in the second quartile for 2008.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes, it does.