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July 7, 2014

Ms. Sandra J. Paske
Secretary to the Commission
Public Service Commission of Wisconsin
Post Office Box 7854
Madison, WI 53707-7854

Dear Ms. Paske:

Elm Road Generating Station Units 1 & 2 - Fuel Flexibility Project

Pursuant to §196.49 and §1.12, Wis. Stats., Chapter PSC 112, Wis. Adm. Code and in accordance with the responsibilities under the Elm Road Generating Station ("ERGS") Unit 1 Facility Lease and Unit 2 Facility Lease, articles 9 and 10, Wisconsin Electric Power Company ("WEPCO") Madison Gas and Electric Company (MGE) and WPPI Energy (WPPI) (collectively referred to as "Applicants") request authorization to upgrade various power block equipment at ERGS to facilitate the use of sub-bituminous coals or Powder River Basin ("PRB") coals as a fuel source. The overall Fuel Flexibility Project ("Project") is to utilize sub-bituminous coals in the Unit 1 and Unit 2 boilers by blending sub-bituminous and bituminous coals at various blend rates, from 0% (i.e., 100% bituminous coal), to 100% sub-bituminous coal (i.e., 0% bituminous coal). This Application requests authority to fund the next steps, Stage 2 of the Project, to upgrade ERGS equipment to enable use of up to a 60% blend, by weight, of PRB coal and enable testing up to 100% PRB.

During Stage 1 of the Project, extensive demonstration testing and several modifications, including boiler modifications, were completed at ERGS to prove Project feasibility. Completion of Stage 1 resulted in the units reliably operating at a sustained 20% PRB blend.[1]

[1] The cost of that stage of the Project was less than the PSC filing threshold and is thus not part of this authorization request.

Stage 2 will deliver significant benefits to customers through substantial fuel cost savings, fuel flexibility and security of fuel supply, as well as reduced hourly emission rates for the major criteria air pollutants. Stage 2 of the Project consists of making the necessary power block modifications at ERGS to enable use of up to a 60% PRB coal blend, by weight, while maintaining current net generating capacity and to facilitate testing of higher PRB blends. Given the current coal storage capacity at the site the ERGS units have a limited ability to operate at levels above 20% PRB blend on a sustained basis. Stage 2 does not include an increase in the coal storage capacity or modification of the fuel handling equipment and thus sustained operation on blends of more than 20% PRB will continue to be limited even after the completion of Stage 2. This limited ability is reflected in the economic analysis included with this filing. Expansion of the coal storage capacity and modification of the fuel handling equipment may be included in future applications.

Stage 2 consists of equipment modifications and additions at an estimated cost of $25 million, excluding Cost of Capital. After implementation of Stage 2 of the Project, Applicants' fuel costs could be reduced by $16 million per year for blends in the range of 60% PRB after taking into account the limited ability to operate above a 20% PRB blend on a sustained basis.

The cost of any modifications that might be needed to enable use of more than 60% PRB coal blend cannot reasonably be determined until testing is completed at higher sub-bituminous blends. Therefore, those costs, if any, are not included in this Application.

Background and Reason for the Project

The ERGS units, each having a net generating capacity of approximately 634 MWe, are located at 10800 South Chicago Road, Oak Creek, Wisconsin. Unit 1 went into service in 2010 and Unit 2 in 2011. The ERGS facilities are operated by WEPCO and are majority-owned by Elm Road Generating Station Supercritical, LLC. MGE and WPPI each have 8.33% part-ownership of ERGS.

The ERGS units were originally designed in 2001 to burn bituminous coal for several reasons; most significantly the known capability to capture mercury ("Hg") from bituminous coals in a wet scrubber system. Technologies to effectively remove Hg associated with combusting sub-bituminous coals were not proven at that time. Therefore, the original 2004 Wisconsin Department of Natural Resources ("DNR") air pollution control construction permit for ERGS identified bituminous coal as the design fuel.

Since the initial planning and design of ERGS, the delivered cost for bituminous coal has increased significantly versus sub-bituminous coal. The delivered cost per MBtu for sub-bituminous coal is now approximately 35% less than bituminous coal. In addition, technology developed over the last decade now allows for the effective capture of Hg from combusting sub-

bituminous coal. In light of these developments, it was prudent for the Company to investigate its options for the use of sub-bituminous coal.

Fuel Flexibility Test Plan

Test plans were developed for a blend of bituminous and sub-bituminous coals in various quantities up to 100% sub-bituminous coal to identify equipment and operational limitations and modifications required for the long term operation of the units. The test program consists of testing the plant's systems and equipment by introducing sub-bituminous coal (blended with bituminous coal) and then gradually increasing the sub-bituminous coal blend percentage until equipment or operational limits are identified. At each incremental step, the test data is closely monitored and evaluated for both immediate limitations (e.g., control systems and logic, fan capacity, pulverizer capacity, etc.) and long term effects (e.g., boiler slagging and fouling, ash and gypsum quality, waste water treatment system effects, etc.). In an effort to minimize operational risk, testing is confined to one unit until confidence is gained with operational performance at various sub-bituminous coal blends.

As limitations are identified, equipment is modified to accommodate the desired sub-bituminous coal blend percentage. The test program goal is to increase the sub-bituminous coal blend percentage to identify and define the equipment and operational limitations that will need to be addressed as we go along. During the Stage 2 work, the goals are (1) to achieve usage of a 60% PRB coal blend, by weight, while maintaining current net generating capacity and (2) to test at higher blend rates up to 100% PRB.

The issues that need to be addressed with burning sub-bituminous coal include:

- Safety due to the greater threat of fires and explosions due to the dusting and the spontaneous combustion characteristics of sub-bituminous coal.
- Increased fuel burn by volume due to the lower heat content of sub-bituminous coal.
- The higher moisture content (27% moisture in sub-bituminous coal vs. 6% moisture in bituminous coal).
- Due to the reflective nature of the slag produced by sub-bituminous coal, the heat transfer characteristics of the boiler are affected. Less heat is absorbed in the furnace section, and more is absorbed in the convective sections, leading to overheating and fouling.
- Air quality control system and waste water treatment system effects due to difference in ash content, sulfur, chlorine, and trace elements as compared to bituminous coal.
- Associated control and logic system limitations as compared to capabilities needed for burning sub-bituminous coal.

Fuel Flexibility Testing

After receiving confirmation that no modifications were necessary to the WPDES permit on October 12, 2012 and receiving a new air pollution control construction permit allowing ERGS to burn up to 100 % PRB coal on January 11, 2013, testing began in May 2013 on Unit 2. Testing began by blending 20% PRB with 80% bituminous coal. This allowed the plant staff to identify, monitor and adjust for any issues associated with firing a 20% PRB blend. With a few plant modifications, the unit was able to sustain a 20% PRB blend. In January 2014, the blend was increased to a 40% PRB and 60% bituminous coal blend. In May 2014 the blend was increased to a 60% PRB and 40% bituminous coal blend. The 40% PRB and 60% PRB test burns were limited, short duration tests to evaluate the short term impacts to define possible activities and modifications that may be addressed during upcoming 2014 Fall outage for Unit 2. Long term effects of using a 40% PRB blend will be evaluated over the Summer/Fall of 2014.

Approximately $100,000-200,000 per unit per week has been saved by WEPCO, MG&E and WPPI in fuel costs associated with using more sub-bituminous coal since beginning the Project.

Description of the Project

Stage 2 of the Project consists of making the necessary power block modifications at ERGS to allow for usage of up to a 60% PRB coal blend, by weight, while maintaining current net generating capacity and to facilitate testing of higher PRB blends. While adequately sized to burn the bituminous coal, some equipment at ERGS is expected to be undersized or not suitable for burning 60% PRB or the higher blends. As a result, certain equipment will require upgrades or replacement.

The Stage 2 work proposed for each unit and for ERGS's common facilities is described below.

- **Distributed Control System/I&C:**
  - Instrumentation to burn down coal silos further into the cone
  - CO monitors in 10 silos and 3 in the tripper gallery
  - DCS and Control Modifications
- **Material handling and Fire Protection:**
  - Re-design braces at top of coal silos – to avoid collection of coal
  - Equipment to facilitate emptying coal silos
  - CO_2 Silo inerting/blanketing for coal silo layup
  - Coal Silo Vibrators for coal flow-ability and silo layup
- **Heat Transfer Surface Cleaning Systems:**
  - Addition of a SCR popcorn ash collector

  - Additional sootblowers in the reheater
  - Water Cannons in Furnace
- **Pulverizer:**
  - Hydraulic system cylinder accumulators for both the grinding and counter pressure to minimize vibration and provide consistent grinding forces.
  - Separate sealing air fan assemblies for each pulverizer to maintain a consistent seal air supply for the pulverizer components.
  - Pulverizer steam inerting system
- **Air Quality Control Systems:**
  - Additional FGD Turndown Capability
  - Calcium bromide injection system to enhance mercury oxidation at high blends of sub-bituminous coal

PRB Blends Up to 100%

During Stage 2, the Company will conduct testing on higher blends of PRB coal up to 100% PRB and will identify the work required to reach 100% PRB. Because identification of the specific equipment modifications cannot be made until testing at higher PRB blends has been completed, this work is not part of this request; however this work may be the subject of a future filing depending on test results.

Scheduling and Procurement

Since the modifications outlined above require substantial engineering, materials have long lead times, and additional testing is necessary to finalize the work scope, Commission approval is requested by December 2014. Receiving approval by December 2014 will provide the ability to complete identified modifications on Unit 2 during the 2015 Fall outage, enabling testing of the next incremental blend following the unit's return to service.

Under the current ERGS Air Pollution Control Construction Permit, all modifications would have to be completed and placed into service on both units by July 11, 2016 unless an extension is granted. An 18 month extension is possible, and may be requested, thus extending the expiration of the Air Pollution Control Construction Permit to January 11, 2018.

Project Cost and Financing

Wisconsin Electric estimates that the cost of the Stage 2 activities is $26,456,000 detailed as follows:

Table 1 – Stage 2 Scope and Cost

Project Description	**20→60% PRB Blend**
DCS/I&C	1,300,000
Material handling and Fire Protection	3,400,000
Heat Transfer Surface Cleaning Systems	10,400,000
Pulverizer Modifications	2,900,000
Air Quality Control Systems	7,000,000
Cost of Capital	1,456,000
Total Capital Cost	26,456,000

There is no removal, salvage value or O&M costs associated with the proposed Project.

Total Gross Project Costs	**$26,456,000**
Wisconsin Electric (83.34%)	$22,484,000
Madison Gas and Electric (8.33%)	$ 2,203,785
WPPI Energy (8.33%)	$ 2,203,785

The costs will be met from internal sources and/or from the issuance and sale of securities.

Description of Alternatives and Economic Analysis

With modifications and testing to date, the units can sustain up to a 20% PRB blend (the "no action" alternative). If the Commission authorizes the additional work proposed in this Application, we believe that the Stage 2 activities will enable operation at the current net generating capacity with up to a 60% PRB blend (the "20% PRB to 60% PRB blend" alternative). As discussed below, sustained operation of the units on PRB blends above 20% PRB will be limited by the current coal storage capacity and fuel handling equipment at the site. Economic analyses of these two alternatives are discussed below.

The economic impact of Stage 2 of the Project was analyzed using the PROMOD simulation model to estimate fuel cost savings. The primary economic impact of burning sub-bituminous coal fuel blends in the ERGS units is the reduction in delivered fuel cost due to the lower cost of sub-bituminous coal compared to bituminous coal.[2] Over 90% of the savings derives from the reduction in fuel cost enabled by the Project. The remaining secondary savings come from increased ERGS generation when the units are offered in the MISO market at the lower PRB blend fuel prices.

The PROMOD modeling shows $21 million in fuel cost savings as a result of moving from 20% PRB to 60% PRB.

However, limited coal storage capacity at the Oak Creek campus reduces fuel cost savings. A probabilistic model (ORACL) was used to quantify this effect. This reduction in fuel cost savings is approximately $5 million per year, resulting in annual net fuel cost savings of $16 million.

Methodology and Key Assumptions:

The methodology and key assumptions for the economic analysis using PROMOD is described in Attachment 1 - PROMOD.

The methodology and key assumptions for the economic analysis of the effect of coal storage limitations using ORACL model is described in Attachment 2 - ORACL.

Effect of the Project on the Cost of Operation and Reliability of Service

The Applicants believe that the proposed Project is the most advantageous means of discharging their obligations as public utilities. This Project will result in significant benefits by delivering substantial fuel cost savings, fuel flexibility and security of fuel supply, as well as reduced hourly emission rates for the major criteria air pollutants. The Project will not substantially impair the efficiency of service, provide facilities in excess of present and probable future requirements or add to the cost of service without proportionately increasing the value or available quantity of service.

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[2] Coal cost comparison is in $/Mbtu.

Description and Cost of Property Being Retired

No facilities are planned to be retired as a result of this Project.

Entities Affected by the Project

The only entity affected by this Project is the WDNR which issued a new air construction permit and provided a letter of acknowledgement that the WPDES permit would not need to be modified for the Project.

Environmental Screening Information

Replacements of plant equipment such as described in this Application are normally categorized as Type III actions under § PSC 4.10(3), Wis. Adm. Code., which does not normally require an environmental screening or preparation of an environmental impact statement.

On January 11, 2013 the Company received an air construction permit from the Wisconsin Department of Natural Resources for the Project in general, and specifically, the work described in this filing. This permit is valid until July 11, 2016 with an opportunity for an 18 month extension.

On June 18, 2014, the United States Environmental Protection Agency (EPA) published proposed Carbon Pollution Standards for Modified and Reconstructed Steam Electric Utility Generating Units under Section 111(b) of the Clean Air Act (GHG NSPS). Once final and effective, these standards would apply to modifications to steam electric utility generating units that commence after June 18, 2014. As discussed above, modification of the boilers to enable the long-term combustion of PRB coal commenced before this date. Accordingly, the proposed GHG NSPS is not applicable to the Project.

Energy Priorities Law

In its decision authorizing the construction of ERGS in 2003, the Commission determined that the Energy Priorities Law (EPL) had been satisfied (Docket No. 05-CE-130). The Wisconsin Supreme Court affirmed the Commission's decision and concluded that the Commission adequately evaluated the EPL.

The purpose of this Project is to make modifications at ERGS to allow the use of sub-bituminous coals in the Unit 1 and Unit 2 boilers by blending sub-bituminous and bituminous coals at various blend rates in order to achieve fuel costs savings at ERGS. The Project does not involve building new capacity, but rather decreasing the cost of operating an existing power plant. There are no non-combustible or combustible renewable or natural gas alternatives that could replace the Project and result in the fuel costs savings that will be realized by burning sub-bituminous coal at ERGS.

The PROMOD runs that analyzed the alternatives to the Project incorporated a load forecast, which accounts for current and forecast energy conservation and efficiency. The results of PROMOD show that the ERGS units continue to operate both before and after the modifications discussed in this Application. In fact, the ERGS units will operate even more as a result of the modifications described in this Application.

Flood Hazard Exposure/Impact

The location of the proposed facilities is not within a flood hazard area.

The Applicants join in this filing. Wisconsin Electric is the primary contact for this Application. If you have any questions concerning this filing, please contact Mr. Paul Farron at (414) 221-3958.

Very truly yours,

James A. Schubilske
Vice President
State Regulatory Affairs

Enclosures: As stated.

Attachment 1 – PROMOD
ERGS PRB Blending Upgrades
Technical Support Document – Economic Analysis

The economic impact of the ERGS PRB Blending Upgrades was analyzed using the PROMOD simulation model. The primary economic impact of burning PRB blends on the ERGS units is the reduction in fuel costs for the same net generator output which results from lower $/MBtu fuel cost from PRB blends. The reduction in fuel expense per MBtu resulting from PRB blending at ERGS accounts for over 90% savings due to this project. The remaining savings are the result of small increases in dispatch of the ERGS units due to reduction in offer prices resulting from lower fuel costs.

Methodology:

PROMOD Model:
The Ventyx PROMOD IV Fundamental Electric Market Simulation Model (PROMOD) was used for this analysis. PROMOD is an integrated electric generation and transmission simulation system. The model performs an hourly chronological security constrained unit commitment and economic dispatch.

ERGS PRB Blending Upgrade Modeling Options:
The cost of operating the ERGS units on various PRB/bituminous coal blends was simulated using PROMOD for the following alternatives:

- ERGS on 20% PRB / 80% bituminous coal
- ERGS on 60% PRB / 40% bituminous coal

Blend percentages are by weight.

Key Assumptions: The PROMOD run used to develop the 2015 Test Year (PSCW Docket 5-UR-107) fuel cost projection was used as the basis for this analysis. The following key modeling assumptions were used for the simulation:

Equivalent Forced Outage Rates: ERGS 1 – 9.8% EFOR, ERGS 2 – 18.5% EFOR

Minimum/Maximum Net Output: ERGS 1&2 – 312 MW / 634 MW

Average Net Heat Rate: ERGS 1&2 - 9,084 Btu/kWh at minimum net output and 8,839 Btu/kWh at maximum net output

Load Forecast: The load forecast used in the PROMOD modeling is from We Energies' November 1, 2013 Energy and Demand forecast.

PROMOD Model: Ventyx PROMOD/Powerbase Version 10.1.3

Fuel Price Forecasts: The coal prices used in the PROMOD analysis for WE units are from the Wisconsin Electric Coal Resources July 12, 2013 coal price forecast. Natural gas prices are based on 8/2/2013 NYMEX prices.

2015	Coal Cost $/ton	Coal Quality Btu/lb	Coal Cost $/MBtu
PRB	39.97	8,800	2.27
Bituminous	85.96	13,000	3.31
20% PRB / 80% Bituminous	76.76	12,160	3.16
60% PRB / 40% Bituminous	58.37	10,480	2.78

Effects of Limited Coal Inventories: PROMOD does not include the impacts on unit dispatch of limited coal inventories. The model assumes that adequate coal inventory is always available to support the projected coal consumptions in the simulation.

Planning Alternatives: The planning alternatives studied were a range of PRB/bituminous coal blends on the two ERGS units:

- 20% PRB / 80% bituminous
- 60% PRB / 40% bituminous

Varying amounts of investment are required in order to be able to burn the 20% PRB and 60% PRB blends continuously on a long-term basis.

Study Results:

2015 PROMOD Results

	Base: 20% PRB / 80% Bit	60% PRB / 40% Bit
Change due to Decrease in in Coal Cost per Mbtu		
Base ERGS Coal Consumption - Gbtu	44,481	44,481
Change in Coal Cost from Base - $/Mbtu	-	-0.38
Change in ERGS Fuel Cost - $ Million		(16.90)
All Other Changes - $Million	-	(0.28)
Total WE Changes - $Million	-	(17.18)
WE Share of ERGS		83.34%
Total Plant Fuel Cost Changes - $Millions		**(20.6)**

Attachment 2 - ORACL

Technical Support Document for

Economic Analysis of OC/ER Fuel Flexibility Initiative

Overview

Coal storage space limits at the Oak Creek/Elm Road ("OC/ER") site has the potential to constrain operations of OC and ER units when rail coal deliveries and unloading do not roughly match unit fuel consumption over time. PROMOD uses monthly coal delivery estimates and hourly coal consumption to simulate the variation in coal inventory at the OC/ER site. For practical purposes, PROMOD never has too much or too little coal because the average coal deliveries roughly match the coal consumption based on PROMOD's predicted energy market prices. Reality is much less certain – the weekly performance of the railroads, the coal unloading facilities, the OC and ER units and the energy market are best represented as ranges of values with a probability distribution around the median or expected value.

A probabilistic model is needed to quantify the short to medium term risk of low coal levels to help make informed operational and market decisions for OC and ER. For example, if a model predicted a high likelihood of very low inventories a month from now, pricing tactics could be used to save coal for use when it is most valuable to customers. Additional coal supply would also be considered, if available.

Wisconsin Electric has recently developed a probabilistic Monte Carlo-type model of OC/ER coal storage levels intended for use in support of operational and market decisions for OC and ER. We have used this model, the Operational Risk Assessment of Coal Levels (ORACL), for the long-term risk assessment in this docket to help determine the value to customers of contemplated modifications for extended operations at a 60/40% blend of sub-bituminous/bituminous coals.

Methodology

The ORACL model is a weekly chronological Monte Carlo-type coal inventory model with coal supply (PRB and Bit train deliveries) and demand (OC and ER unit availability plus energy market LMPs) based on probabilistic assumptions. The acronyms are "PRB" for Powder River Basin sub-bituminous coal from Wyoming and "Bit" for Bituminous coal from northern Appalachia. The Monte Carlo draws for one week are completely independent of the prior week's random draws. The primary result used in this analysis is the expected OC and ER net revenue given current coal storage capacity.

Results

The ORACL model was run for one year 10,000 times for the two alternatives – the current coal storage capacity and double the current coal storage capacity. The average net margin of the difference between these runs was $6-8 million for OC and ER.

With a larger coal pile there are increased carrying costs estimated at $1-2 million, depending on the average inventory level.

The net difference of $4-6 million is the value of doubling the coal storage capacity or conversely, the value lost in having the current coal storage capacity compared to one twice the current size.

Key Assumptions

The ORACL model includes ten variables with random draws per week. Each variable is discussed in more detail below.

- Six unit forced outage rates (OC 5-8, ER 1-2) based on 5-year average forced and maintenance outage rates
- PRB train deliveries per week
- Bit train deliveries per week
- Coal unloading facility outage rate
- Weekly Energy Prices (LMPs)

Forced and maintenance outage rates – Unit forced plus maintenance outage rates for the five-year period [2009-2013] were used:

  - OC5-8: 17 %
  - ER1-2: 9%

PRB and Bit train deliveries per week – The number of trains delivered to the OC/ER site varies by week depending on the number of trains in service, rail traffic congestion, coal mine loading time and OC/ER site unloading durations. The following probability distributions of trains per week were used:

PRB trains per week (expected value = 6.0 trains per week):

Trains	Probability
0	1%
1	1%
2	1%
3	3%
4	5%
5	8%
6	39%
7	42%
8	0%
Total	100%

Bit trains per week (expected value = 2.0 trains per week):

Trains	Probability
0	5%
1	17%
2	51%
3	27%
4	0%
5	0%
Total	100%

Coal unloading facility outage rate – There is a 2% chance in any week that the OC/ER coal unloading facility has an unplanned or forced outage. The forced outage rate is in addition to one planned two-week rail delivery and coal unloading outage per year. During coal unloading facility outages no coal is delivered to coal storage.

Weekly OC/ER Energy Prices (LMPs) – Unlike PROMOD where LMPs are a result from the model, the ORACL uses LMP projections as an input. The past nine years of LMP price history was broken into 52 one-week segments. One of the nine one-week segments is selected for each week of the simulation.

Initial Coal Inventory – The model starts in May with both PRB and Bit inventories set at two-thirds full. This is typical for May actual inventories.

Calculations

After outages, trains and prices are randomly determined for a trial (one iteration), the following calculations take place for each week.

Coal additions to inventory – Additions are normally based on PRB and Bit train deliveries this week, the coal quantity per train (fixed tons per train for PRB and Bit) and whether the coal unloading facility is forced out this week. If PRB or Bit coal inventory was high after last week (inventory at or above storage capacity), PRB or Bit trains are rejected this week and there is no addition to PRB or Bit inventory this week. PRB and Bit inventories are checked separately.

Coal consumption from inventory – Consumption is normally based on OC/ER unit availability and market LMPs for this week but if PRB or Bit coal inventory is low, OC or ER or both plants operations are adjusted to reduce coal consumption. Whenever unit operations must be adjusted to reduce coal consumption, net revenue is reduced – this is the only source of lost value.

- Economic dispatch of the units – A simplified dispatch algorithm is used – if the LMP is above the unit dispatch price, the unit runs at full load; if the LMP is below the unit dispatch price, the unit runs at minimum load.
- Low coal inventory levels – Defined as less than two weeks of inventory for the available (not on outage) OC and ER units at full load and ER at 60% PRB blend.
- Operational constraints at low coal inventory levels – There are three types of low inventory conditions and several unit operational changes to address the low inventory.
    1. Low PRB inventory – ER PRB fuel blend is reduced from 60% PRB to 40, 20 or 0% PRB. If reducing ER PRB blend does not avoid low inventories, OC units are set to run at minimum load and ER PRB blend is lowered.
    2. Low Bit inventory – ER PRB blend set to 60% PRB blend and ER units are set to run at minimum load.
    3. Both PRB and Bit low inventory – ER PRB blend set to 60% PRB blend and ER units are set to run at minimum load. If that is not sufficient, all OC and ER units are set to run at minimum load.

Net Revenue – Unit net revenue is the unit energy revenue, generation (MWh) times LMP ($/MWh), minus unit coal costs, generation (MWh) times fuel cost ($/MWh).

ORACL Model – Software and Data Management Specification

The ORACL model is written in VBA within an Excel spreadsheet. LMP price history is queried from local SQL databases. Summary results are stored in Excel. Detailed results for each iteration are not saved.