APPENDIX 7A

IMPLEMENTATION PLAN AND RESOURCE ACQUISITION STRATEGY

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IMPLEMENTATION PLAN

SECTION 1: IMPLEMENTATION PLAN

(9) The utility shall develop an implementation plan that specifies the major tasks and schedules necessary to implement the preferred resource plan over the implementation period. The implementation plan shall contain:

1.1 SCHEDULE OF RESEARCH

(A) A schedule and description of ongoing and planned research activities to update and improve the quality of data used in load analysis and forecasting;

GMO plans to conduct its next residential appliance saturation survey in 2010. GMO will continue to obtain and use updated end-use data from the US Department of Energy (DOE) for its statistically adjusted end-use models.

1.2 SCHEDULE OF DSM PROGRAMS

(B) A schedule and description of ongoing and planned demand-side management programs, program evaluations and research activities;

Schedules and descriptions of existing and proposed demand-side management programs and research activities are shown in Figure 1 and Figure 2 below:

Figure 1: Existing Energy Efficiency and Demand Response Programs

	Programs in IRP	Budgets approved and tariffs filed	Program Launch	EM&V Report Due
Existing Energy Efficiency Programs - Residential				
Change a Light	Jan-09	Mar-08	Jan-07	Sep-10
Energy Star	Jan-09	Mar-08	Mar-08	Sep-10
Low Income Weatherization	Jan-09	Mar-08	Mar-08	Sep-10
Low Income Affordable New Homes	Jan-09	Mar-08	Mar-08	Sep-10
Energy Star New Homes	Jan-09	Mar-08	Mar-08	Sep-10
Existing Energy Efficiency Programs - Commercial and Industrial				
Building Operator Certification	Jan-09	Mar-08	Mar-08	Sep-10
Existing Demand Response Programs				
Energy Optimizer	Jan-09	Oct-08	Oct-08	Apr-11
MPower	Jan-09	Oct-08	Oct-08	Apr-11

Figure 2: Proposed Energy Efficiency Programs and DSM Research Activities

	Programs in IRP	Budgets approved and tariffs filed	Program Launch	EM&V Report Due
Proposed Energy Efficiency Programs - Residential				
Appliance Turn In	Jan-09	Jan-10	Apr-10	Jul-12
Blue Line	Jan-09	Jan-10	Apr-10	Jul-12
Cool Homes	Jan-09	Jan-10	Apr-10	Jul-12
Energy Star	Jan-09	Jan-10	Apr-10	Jul-12
On Line Audit	Jan-09	Jan-10	Apr-10	Jul-12
Proposed Energy Efficiency Programs - Commercial & Industrial				
Custom Rebate	Jan-09	Jan-10	Apr-10	Jul-12
Prescriptive Rebate	Jan-09	Jan-10	Apr-10	Jul-12
		Research Completed		
Research Activities				
Evaluation of Financing Efficiency Programs	Jan-09	Oct-09		
Evaluation of Street Lighting and Other Outdoor Lighting Programs	Jan-09	Oct-10		
Multi-family Dwelling Energy Efficiency Study	Jan-09	Dec-09		
Time of Use, Peak Pricing and Demand Response Tariff Evaluation	Jan-09	Jun-10		

Note that an evaluation work plan for the existing energy efficiency and demand response programs has been authored by Opinion Dynamics Corporation and is attached as Appendix 7B.

1.3 SCHEDULE OF RESOURCE ACQUISITION

(C) A schedule and description of all supply-side resource acquisition and construction activities; and

The new generating unit currently under construction, Iatan-2, will provide GMO with 153 MW of capacity beginning in 2010. The current schedule is shown in Figure 3 below:

Figure 3: Iatan-2 Construction Schedule

Iatan-2 Major Milestone Schedule		
Milestone Description	**Completion Date**	**Status**
Turbine Generator Under Contract	January, 2006	Complete
Other Major Equipment Vendors Under Contract (Boiler Island, AQC and SCR)	July, 2006	Complete
Site mobilization and Start Construction Underground and Foundation Work	Summer/Fall, 2006	Complete
Control Budget Estimate & Level 1 Schedule	November, 2006	Complete
Start of Boiler Steel Erection	August, 2007	Complete
Boiler Steel Complete	April, 2008	Complete
Turbine Generator Delivery	May, 2008	Complete
Landfill- First Cell Complete	December, 2008	Complete
FGD & Fabric Filter Complete	June, 2009	Tracking Late
Turbine Generator Complete	November, 2009	Tracking Late
First Fire on Oil	November, 2009	Tracking Late
In-Service (Provisional Acceptance)	June, 2010	Tracking Late
Final Acceptance (Substantial Completion)	February, 2011	Tracking Early

1.4 CRITICAL PATH

(D) Identification of critical paths and major milestones for each resource acquisition project, including decision points for committing to major expenditures.

The critical paths, major milestones and decision points for the Iatan-2 resource addition are shown in Figure 3 above. For all other resource additions identified in the Preferred Resource Plan, these items are included as the implementation plans in Section 2.2, the Resource Acquisition Strategy.

RESOURCE ACQUISITION STRATEGY

SECTION 2: RESOURCE ACQUISITION STRATEGY & CORPORATE APPROVAL STATEMENT

(10) The utility shall develop, document and officially adopt a resource acquisition strategy. This means that the utility's resource acquisition strategy shall be formally approved by the board of directors, a committee of senior management, an officer of the company or other responsible party who has been duly delegated the authority to commit the utility to the course of action described in the resource acquisition strategy. The officially adopted resource acquisition strategy shall consist of the following components:

The corporate approval statement is provided on the following page:

KCP&L GREATER MISSOURI OPERATIONS COMPANY
2009 INTEGRATED RESOURCE PLAN
CORPORATE APPROVAL STATEMENT FOR
RESOURCE ACQUISITION STRATEGY

The 2009 Integrated Resource Plan ("IRP") of KCP&L Greater Missouri Operations Company ("GMO") was prepared under our direction and control. This includes eight (8) Volumes that comprise the IRP. To the best of our knowledge, information, and belief, the methods used and the procedures followed by GMO in formulating the resource acquisition strategy contained in the IRP comply with the provisions of Chapter 22 of the regulations of the Missouri Public Service Commission ("Commission") subject to waivers previously granted by the Commission.

As required by 4 CSR 240-22.080(10) the referenced resource acquisition strategy includes: 1) the Preferred Resource Plan, 2) an implementation plan for the new resource additions included in the Preferred Resource Plan, 3) ranges of the critical uncertain factors, 4) contingency options, and 5) monitoring and reporting processes of the critical uncertain factors. Pursuant to the requirements of the Commission's regulations, GMO will notify the Commission if GMO determines that circumstances have changed so that the Preferred Resource Plan identified in GMO's 2009 Integrated Resource Plan is no longer appropriate.

William H. Downey
President and Chief Operating Officer
KCP&L Greater Missouri Operations Company

Todd Kobayashi
Vice President, Strategy and Risk Management
KCP&L Greater Missouri Operations Company

2.1 PREFERRED RESOURCE PLAN

(A) A preferred resource plan selected pursuant to the requirements of section (6) of this rule;

Each of the twenty-four alternative resource plans evaluated included adequate renewable generation to meet the requirements of Missouri Proposition C ("Prop C") including solar generation requirements. Results from the twenty-four alternative resource plans ranked by NPVRR demonstrate that the Preferred Resource Plan includes the full level of proposed DSM programs and wind installations exceeding estimated needs to meet Prop C requirements. In addition, the Preferred Resource Plan includes a conversion of Sibley 1&2 to burn 10% biomass at an estimated delivered price of $4/mmBtu by 2015. These biomass retrofits are short lead time projects, and occur outside the 3-year implementation plan period so plans for these conversions are not covered in the Resource Acquisition Strategy. Also, the Preferred Resource Plan includes environmental retrofits by 2015 on the coal generating units at Sibley Station and Lake Road 4-6 that would meet or exceed future BACT requirements.

The Preferred Resource Plan is shown in Table 1 below:

Table 1: Preferred Resource Plan

	Plan 22: Install Prop C Wind and Solar, CT's, Additional 500 MW Wind Above Prop C beginning in 2012, All DSM, and Sibley 1&2 converted to 10% biomass usage				
Date	Install CT's	Install Solar	Install Prop C Wind	Install Other Wind	All DSM
2009	0				5.9
2010	0				31.8
2011	0	1.79			64.1
2012	0	0.03		100	89.4
2013	0	0.02			109.4
2014	0	2.80			122.9
2015	0	0.05			127.3
2016	0	0.11	100	100	131.7
2017	0	0.08		200	134.9
2018	0	5.02	100		138.6
2019	0	0.15			142.0
2020	0	0.20			143.4
2021	0	5.33	100		144.3
2022	0	0.24			144.4
2023	0	0.24	100		144.2
2024	0	0.32		100	143.8
2025	154	0.26			141.1
2026	0	0.32			138.3
2027	0	0.32			135.3
2028	154	0.35			131.2
2029	0	0.25			126.7

The solar installations are estimates of the installed solar capacity required to fulfill the requirements of Missouri's Proposition C (Prop C) Renewable Energy Standard. The four 100 MW wind additions in 2016, 2018, 2021 and 2023 are Prop C requirements. The Preferred Resource Plan also includes additional 500 MW of wind installations above Prop C requirements – 100 MW in 2012, 100 MW in 2016, 200 MW in 2017, and 100 MW in 2024. It should be noted that solar and renewable energy requirements associated with Prop C, could be obtained from purchase of renewable energy credits (REC). Also, although ownership of these resources was modeled for in the alternative resource plans, future bid proposals may result in lower costs based on either purchase power agreements (PPA) or ownership.

2.2 IMPLEMENTATION PLAN

(B) An implementation plan developed pursuant to the requirements of section (9) of this rule;

2.2.1 WIND & SOLAR IMPLEMENTATION

Figure 4 below shows the expected milestones and critical paths required to meet a 2012 in-service date for new wind.

Figure 4: 2012 Wind Installation Milestones

Schedule for 2012 Wind Acquisition		
Milestone Description	Completion Date	Status
Issue RFP (Currently Under Development)	3rd Quarter, 2009	On Track
Receive and Evaluate Proposals	12/31/2009	Pending
Negotiate Contracts - PPA or Ownership	Allow 6-months	Pending
Equipment Delivery and Construction Begins: Wind Farm, Substation and Interconnection	Allow 3 to 6 months	Pending
Last Wind Turbine Commissioned	Allow 6 to 9 months	Pending
Earliest Expected On-Line Date For New Construction	2nd Quarter, 2011	Pending

Figure 5 below shows the expected milestones and critical paths required to meet the 2011 Prop C requirements for solar-based generation.

Figure 5: 2011 Solar Milestones

Schedule for 2011 Solar Acquisition		
Milestone Description	Completion Date	Status
Issue RFP	5/9/2009	Complete
Receive and Evaluate Proposals	6/30/2009	Complete
Negotiate Contract for 2011 PPA, RECs or Ownership	12/31/2009	Pending

2.2.2 DSM IMPLEMENTATION

The critical paths and major milestones for DSM implementation are shown above in Section 1.2.

2.2.3 ENVIRONMENTAL RETROFIT IMPLEMENTATION

The major milestones for the environmental retrofits on Lake Road and the Sibley units are shown in Figure 6 below.

Figure 6: Environmental Retrofits

Lake Road and Sibley Environmental Retrofit Timeline		
Milestone	**Start Date**	**End Date**
Project Charter & Associated Business Case	8/17/2009	10/1/2009
Identify Stakeholders & Core Team	9/1/2009	10/1/2009
Define Preliminary Scope, Schedule, & Budget	9/1/2009	11/1/2009
Select & Retain Owner's Engineer	11/1/2009	1/15/2010
Collect Historical Data & Perform Baseline Testing	11/1/2009	6/1/2010
Technical Specification Development	2/1/2010	2/1/2011
Bid, Evaluate, and Award Contracts	6/1/2010	8/1/2011
Vendor Engineering & Equipment Delivery	8/1/2010	8/1/2013
Construction	1/1/2011	1/1/2015
Startup & Commissioning	1/1/2015	4/1/2015

2.3 RANGES OF CRITICAL UNCERTAIN FACTORS

(C) A specification of the ranges or combinations of outcomes for the critical uncertain factors that define the limits within which the preferred resource plan is judged to be appropriate and an explanation of how these limits were determined;

The ranges of critical uncertain factors are calculated by finding the value at which the critical uncertain factor needs to change in order for the Preferred Resource Plan to no longer be the lowest cost option. The values of the NPVRR for the Preferred Resource Plan and the lowest cost plan under extreme conditions are compared and by using linear interpolation a crossover point value is found and expressed as a percent of the range of the critical uncertain factor. These percentages are superimposed on the high, mid and low forecasts for each critical uncertain factor to develop the resulting ranges.

2.3.1 CRITICAL UNCERTAIN FACTOR: CO_2

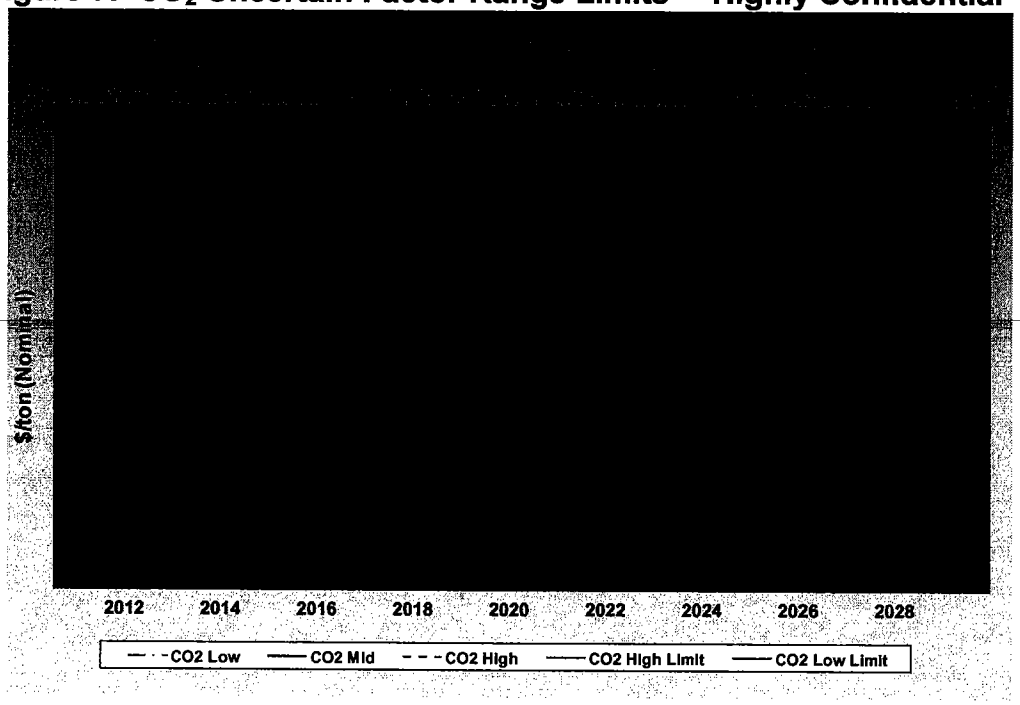
The uncertain factor range calculation is detailed in Table 2 below:

Table 2: CO_2 Uncertain Factor Range

CO_2		
Plan	Mid	High
Plan24	14,809	16,106
Plan22	14,735	16,110
Percent	from Mid	from Low
Upper %	95.18%	97.59%
Plan	Mid	Low
Plan06	14,936	14,121
Plan22	14,735	14,125
Percent	from Mid	from Low
Lower %	-97.89%	1.06%

The resulting limits of the range of this critical uncertain factor are detailed in Figure 77 below:

Figure 7: CO_2 Uncertain Factor Range Limits ** Highly Confidential **



2.3.2 CRITICAL UNCERTAIN FACTOR: COAL

The uncertain factor range calculation is detailed in Table 3 below:

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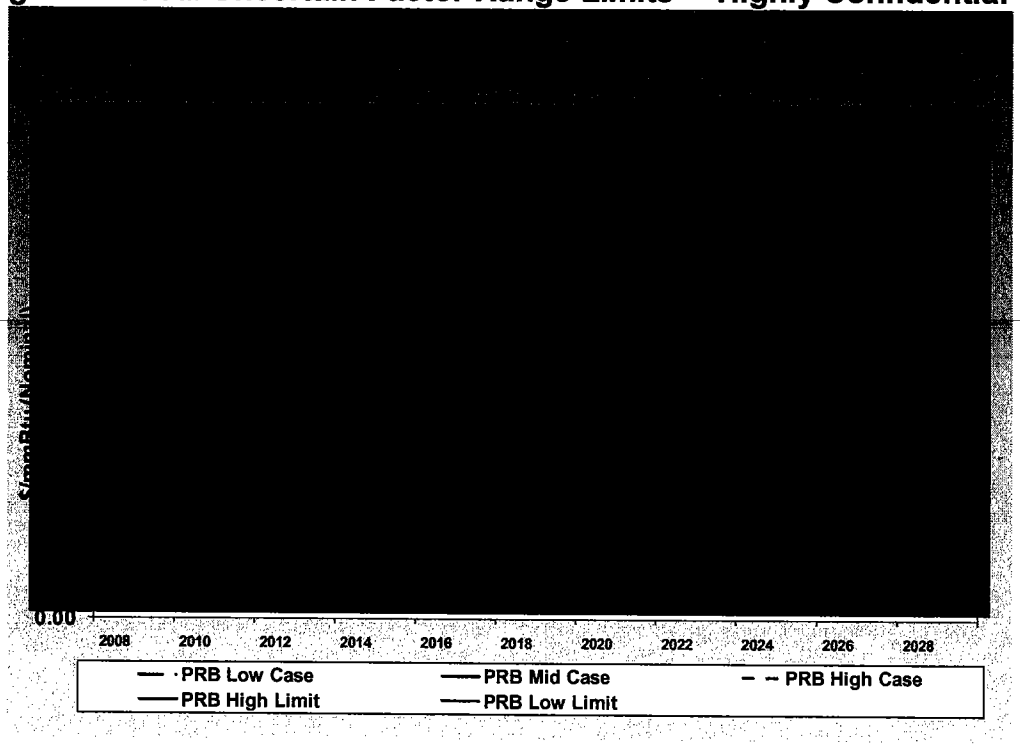
Table 3: Coal Uncertain Factor Range

Coal		
Plan	Mid	High
Plan24	14,809	15,371
Plan22	14,735	15,397
Percent	from Mid	from Low
Upper %	73.62%	86.81%
Plan	Mid	Low
Plan23	14,806	14,772
Plan22	14,735	14,788
Percent	from Mid	from Low
Lower %	-82.52%	8.74%

The resulting limits of the range of this critical uncertain factor are detailed in Figure 88 below:

Figure 8: Coal Uncertain Factor Range Limits ** Highly Confidential **



2.3.3 CRITICAL UNCERTAIN FACTOR: CONSTRUCTION COSTS

The uncertain factor range calculation is detailed in Table 4 below:

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Table 4: Construction Costs Uncertain Factor Range

Construction		
Plan	Mid	High
Plan07	15,000	14,276
Plan22	14,735	14,379
Percent	from Mid	from Low
Upper %	71.85%	85.92%
Plan	Mid	Low
Plan21	14,813	14,841
Plan22	14,735	14,903
Percent	from Mid	from Low
Lower %	-55.60%	22.20%

The resulting limits of the critical uncertain factor must be compared on a technology by technology basis.

2.3.4 CRITICAL UNCERTAIN FACTOR: LOAD

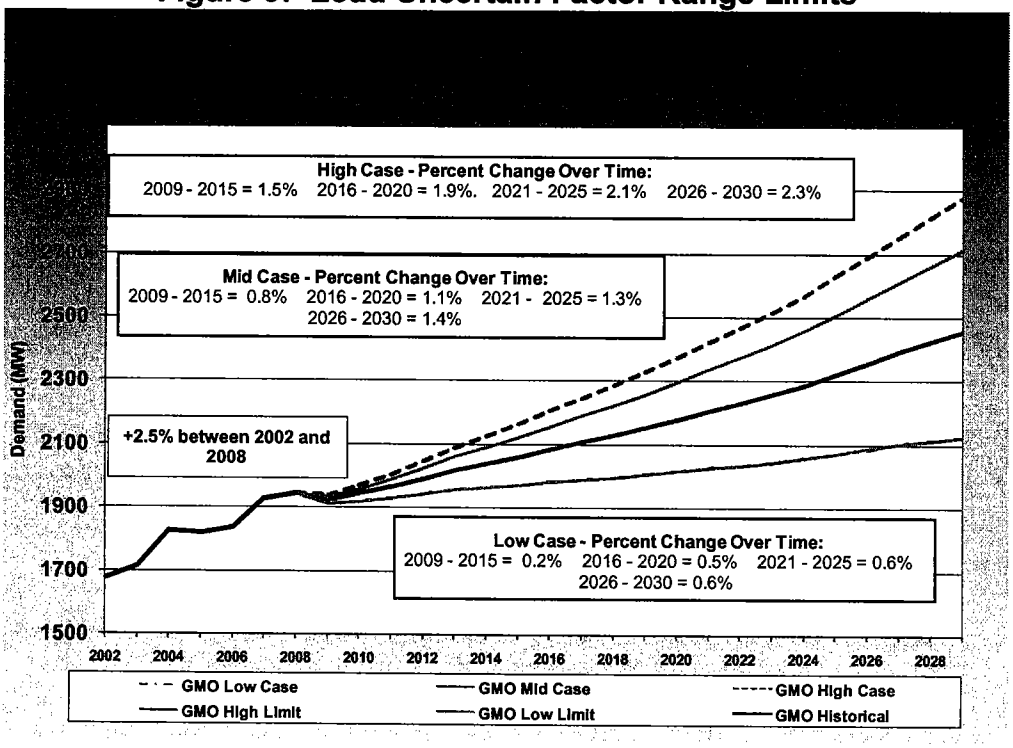
The uncertain factor range calculation is detailed in Table 5 below:

Table 5: Load Uncertain Factor Range

Load		
Plan	Mid	High
Plan23	14,806	16,044
Plan22	14,735	16,099
Percent	from Mid	from Low
Upper %	56.62%	78.31%
Plan	Mid	Low
Plan07	15,000	13,644
Plan22	14,735	13,644
Percent	from Mid	from Low
Lower %	-99.93%	0.03%

The resulting limits of the range of this critical uncertain factor are detailed in Figure 99 below:

Figure 9: Load Uncertain Factor Range Limits



2.3.5 CRITICAL UNCERTAIN FACTOR: NATURAL GAS

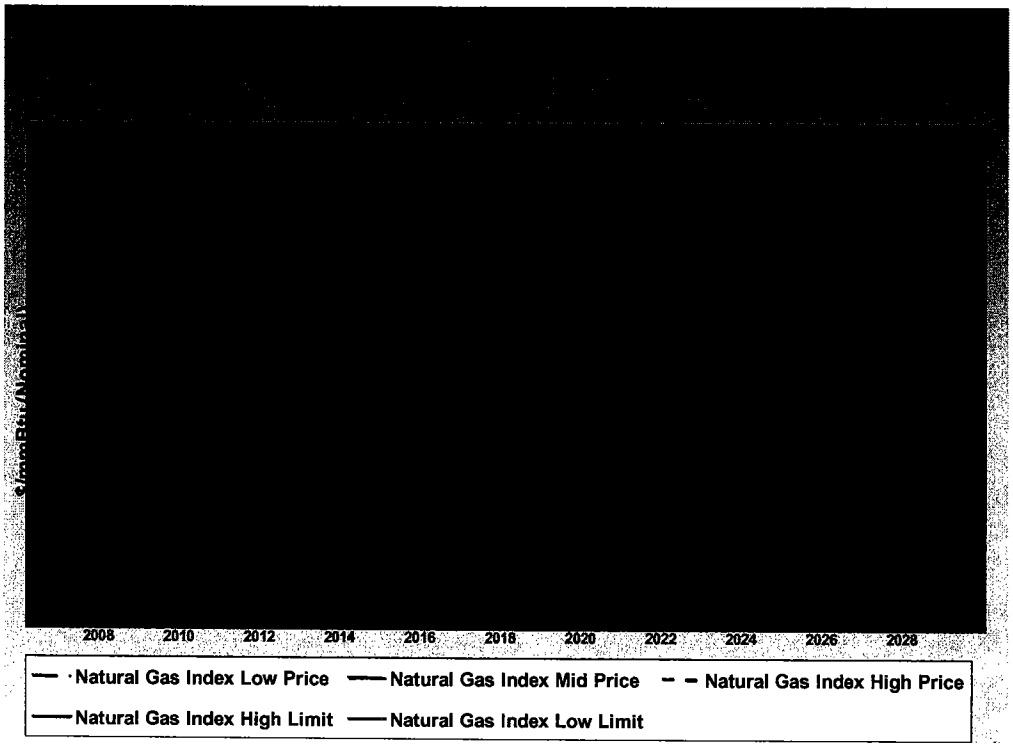
The uncertain factor range calculation is detailed in Table 6 below:

Table 6: Natural Gas Uncertain Factor Range

Natural Gas		
Plan	Mid	High
Plan23	14,806	15,077
Plan22	14,735	15,095
Percent	from Mid	from Low
Upper %	79.92%	89.96%
Plan	Mid	Low
Plan07	15,000	14,917
Plan22	14,735	14,932
Percent	from Mid	from Low
Lower %	-94.37%	2.81%

The resulting limits of the range of this critical uncertain factor are detailed in Figure 1010 below:

Figure 10: Natural Gas Uncertain Factor Range Limits ** Highly Confidential **



2.3.6 CRITICAL UNCERTAIN FACTOR: FINANCIAL DRIVERS

In the preliminary sensitivity studies, it was determined that the plans would only be sensitive to an upward movement in financial drivers. The uncertain factor range calculation is detailed in Table 7 below:

Table 7: Financial Drivers Uncertain Factor Range

	Financial	
Plan	Mid	High
Plan07	15,000	14,917
Plan22	14,735	14,932
Percent	from Mid	from Low
Upper %	94.37%	97.19%

The resulting limits of the range of this critical uncertain factor are detailed in Table 8 below:

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Table 8: Financial Drivers Uncertain Factor Range Limits ** Highly Confidential **

Measure	Low-Case	Mid-Case	High-Limit	High-Case
Inflation				
Short-term Rate				
Long-term Rate				
Return on Equity				
Debt Ratio				
Short-term debt / CWIP				
Pre-tax Return on Ratebase				
After-tax Return on Ratebase (t=39%)				
AFUDC Equity Rate				
AFUDC Debt Rate				
AFUDC Rate				

2.4 CONTINGENCY OPTIONS

(D) A set of contingency options that are judged to be appropriate responses to extreme outcomes of the critical uncertain factors and an explanation of why these options are judged to be appropriate responses to the specified outcomes; and

The risk analysis demonstrates that should any critical uncertain factor limit be exceeded, the current Preferred Resource Plan should be reviewed with a number of Alternative Resource Plans. Each uncertain factor risk can cause different Alternative Resource Plan to perform better. The Alternative Resource Plans that should be evaluated along with the Preferred Resource Plan for each uncertain factor are listed in Table 9 below.

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Table 9: Alternative Plans for Each Uncertain Factor

Sensitivity	Plan06	Plan07	Plan21	Plan23	Plan24
High CO2			X		X
High Gas			X	X	X
High Load Growth				X	X
High Construction	X	X			X
High Coal					X
High Interest	X	X			X
Low CO2	X	X			
Low Gas	X	X			
Low Load Growth		X			X
Low Construction		X	X		
Low Coal		X		X	

The description of each Alternative Resource Plan is given in Table 10 below. Each of the contingency plans shown above are identical to the preferred plan during the 3-year implementation period, except for Plan 21, which calls for the first 100 MW of wind in 2010. Changes in critical uncertainties will not be known in time to achieve this in-service date, so it is unlikely that Plan 21 is a viable contingency.

Table 10: Alternative Resource Plans 1 - 24

	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6
DSM	All	None	All	None	All	All
Solar Begin: 2011	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C
Wind	400 MW Begin: 2016	400 MW Begin: 2016	600 MW Begin: 2016	500 MW Begin: 2014	300 MW Begin: 2018	400 MW Begin: 2016
Combustion Turbines	308 MW	462 MW	308 MW	462 MW	308 MW	308 MW
Combustion Fluidized Bed (100% Biomass)					50 MW	
Coal w/Carbon Capture and Sequestration						
10% Biomass Utilization in Existing Units						108 MW
Coal Retirement						
	Plan 7	Plan 8	Plan 9	Plan 10	Plan 11	Plan 12
DSM	All	None	All	None	All	All
Solar Begin: 2011	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C
Wind	400 MW Begin: 2016	400 MW Begin: 2016	600 MW Begin: 2016	500 MW Begin: 2014	300 MW Begin: 2018	800 MW Begin: 2016
Combustion Turbines	462 MW	616 MW	462 MW	616 MW	462 MW	308 MW
Combustion Fluidized Bed (100% Biomass)					50 MW	
Coal w/Carbon Capture and Sequestration						
10% Biomass Utilization in Existing Units						
Coal Retirement	108 MW	108 MW	108 MW	108 MW	108 MW	
	Plan 13	Plan 14	Plan 15	Plan 16	Plan 17	Plan 18
DSM	All	All	Existing	1%	All	All
Solar Begin: 2011	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C
Wind	400 MW Begin: 2016	800 MW Begin: 2016	800 MW Begin: 2016	800 MW Begin: 2016	900 MW Begin: 2012	900 MW Begin: 2010
Combustion Turbines	154 MW	308 MW	462 MW	0	308 MW	308 MW
Combustion Fluidized Bed (100% Biomass)						
Coal w/Carbon Capture and Sequestration	150 MW					
10% Biomass Utilization in Existing Units						
Coal Retirement						
	Plan 19	Plan 20	Plan 21	Plan 22	Plan 23	Plan 24
DSM	All	All	All	All	All	All
Solar Begin: 2011	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C	Mo. Prop C
Wind	900 MW Begin: 2010	900 MW Begin: 2010	900 MW Begin: 2010	900 MW Begin: 2012	900 MW Begin: 2012	900 MW Begin: 2012
Combustion Turbines	308 MW	154 MW	154 MW	308 MW	154 MW	154 MW
Combustion Fluidized Bed (100% Biomass)						
Coal w/Carbon Capture and Sequestration		150 MW	150 MW		150 MW	150 MW
10% Biomass Utilization in Existing Units	108 MW		108 MW	108 MW		108 MW
Coal Retirement						
Note: Combustion Turbines Not Needed Until 2022 Unless No DSM or Sibley 1&2 Retired						

2.5 MONITORING CRITICAL UNCERTAIN FACTORS

(E) A process for monitoring the critical uncertain factors on a continuous basis and reporting significant changes in a timely fashion to those managers or officers who have the authority to direct the implementation of contingency options when the specified limits for uncertain factors are exceeded.

Each critical uncertain factor is reviewed on an individual basis due to the varied nature of the information sources used in its review.

Critical Uncertain Factor: CO_2

CO_2 credit prices are reviewed on a continual basis. The data sources used are third party views predicting the price of the credits. Most of these third party studies are sparked by proposed legislation or are updated up to a quarterly basis. This review and update is conducted by the Fuels department with a full review conducted on an annual basis.

Critical Uncertain Factor: Coal

Coal prices are updated for all purposes within the company on a monthly basis. This review is conducted by the Fuel department.

Critical Uncertain Factor: Construction Costs

Construction costs are updated as new information comes in from sources such as EPRI TAG, published third party reports, RFP responses, etc. This review and updating is a continual process.

Critical Uncertain Factor: Load

Load forecasts are updated on an annual basis as part of the company's annual budgeting process.

Critical Uncertain Factor: Natural Gas

Natural Gas forecasts are updated weekly with executive updates provided on a monthly basis.

Critical Uncertain Factor: Financial Drivers

Financial measures are updated annually as part of the annual budget process.

Market conditions may change the time frame under which a new review of any of these aforementioned forecasts would occur.