

PMFermiCOLPEm Resource

From: David B Harwood [harwoodd@dteenergy.com]
Sent: Monday, January 05, 2009 4:06 PM
To: Lemont, Stephen
Cc: James R Padgett; Randall D Westmoreland; Peter W Smith
Subject: RE: Michigan Public Service Commission
Attachments: u-15896_12-23-2008.pdf

Steve,

The link below will take you the portion of the recently passed Michigan Energy Legislation that deals specifically with the New Certificate of Necessity process.

<http://legislature.mi.gov/doc.aspx?mcl-460-6s>

As you will see in paragraph 10, the commission is to adopt standard application filing forms and instructions for use in all requests for a certificate of necessity within 90 days of the effective date of the law. Since the effective date of the law was October 6, 2008, this would put the deadline at January 4, 2009.

On December 23, 2008, the MPSC issued an ORDER AND NOTICE OF OPPORTUNITY TO COMMENT (attached) related to the Certificate of Necessity process that I believe meets the intent of the deadline. However, as we discussed this morning, this will likely be refined and further revised in the future.

Paul Proudfoot is the MPSC staff lead for implementation of the new RPS, EE, and IRP (Certificate of Necessity) and his number is 517-241-6142. His email is proudfootp@michigan.gov. He has been made aware that you may contact him regarding the Fermi 3 COLA process. If you have any other questions, please call me at 313-235-7652.

Dave

-----Stephen Lemont <Stephen.Lemont@nrc.gov> wrote: -----

To: David B Harwood <harwoodd@dteenergy.com>
From: Stephen Lemont <Stephen.Lemont@nrc.gov>
Date: 01/03/2009 08:15PM
Subject: RE: Michigan Public Service Commission

David,

Any time in the morning after 9 AM would be fine.

Thanks,
Steve Lermont

From: David B Harwood [harwoodd@dteenergy.com]
Sent: Saturday, January 03, 2009 3:15 PM
To: Stephen Lemont
Cc: Peter W Smith; Randall Westmoreland
Subject: Re: Michigan Public Service Commission

Stephen,

I will give you a call on Monday to discuss. Is there a time that works best for you?

Dave Harwood
Director - Nuclear Development
313-235-7652

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From: Stephen Lemont [Stephen.Lemont@nrc.gov]
Sent: 01/01/2009 07:00 AM EST
To: David Harwood
Cc: Randall Westmoreland
Subject: RE: Michigan Public Service Commission

David,

Randy Westmoreland referred me to you on this matter. I need to know who DTE has been working with at MPSC, and their contact information. Also, if you can shed additional light on the nature of DTE's interactions with MPSC to date, please provide that information to me as well. Please see the email exchange below between Randy and me to see what has already been discussed.

Thanks,
Stephen Lemont, Ph.D.
Environmental Project Manager
United States Nuclear Regulatory Commission
Office of New Reactors
Mail Stop: T-6D32
Washington, DC 20555-0001
Telephone: 301-415-5163
Fax: 301-415-6350
Email: Stephen.Lemont@nrc.gov

From: Randall D Westmoreland [<mailto:westmorelandr@dteenergy.com>]
Sent: Monday, December 29, 2008 1:20 PM
To: Stephen Lemont
Cc: David B Harwood
Subject: RE: Michigan Public Service Commission

Steve,

Please talk to Dave Harwood regarding the MPSC. He is the Director of our Nuclear Development group. His number is 313-235-7652. I don't think he'll be back in the office until next week.

Randy Westmoreland
Nuclear Development-Licensing
Technical Expert
Office: 313-235-3368
Pager: 734-457-7895

CARING ABOUT THE ENVIRONMENT IS THE NATURE OF
OUR JOB.

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-----Stephen Lemont <Stephen.Lemont@nrc.gov> wrote: -----
To: 'Randall D Westmoreland' <westmorelandr@dteenergy.com>
From: Stephen Lemont <Stephen.Lemont@nrc.gov>
Date: 12/23/2008 02:09PM
Subject: RE: Michigan Public Service Commission
Thanks, Randy. Please also let me know who DTE has been working with at MPSC, and provide me with their contact information.

Steve Lemont

From: Randall D Westmoreland [<mailto:westmorelandr@dteenergy.com>]
Sent: Tuesday, December 23, 2008 1:58 PM
To: Stephen Lemont
Cc: Peter W Smith; Michelle Moser; Kirk LaGory; LaShawn G Green; David B Harwood
Subject: Re: Michigan Public Service Commission

Steve,

I am not sure what coordination, if any has occurred thus far. I will check into this. Regarding approvals from the MPSC, recently Michigan passed new legislation that will require DTE to get a certificate of need. I don't believe they have finished writing the rules on how this process will work yet.

Randy Westmoreland
Nuclear Development-Licensing
Technical Expert
Office: 313-235-3368
Pager: 734-457-7895

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-----Stephen Lemont <Stephen.Lemont@nrc.gov> wrote: -----
To: Randall D Westmoreland <westmorelandr@dteenergy.com>
From: Stephen Lemont <Stephen.Lemont@nrc.gov>
Date: 12/19/2008 11:49AM
cc: Peter W Smith <smithpw@dteenergy.com>, Michelle Moser <Michelle.Moser@nrc.gov>, Kirk LaGory <lagory@anl.gov>
Subject: Michigan Public Service Commission
Randy,

For the Fermi 3 project, has DTE been working or otherwise coordinating with the Michigan Public Service Commission; and if so, in what way? Also, does the Fermi 3 project need any kind of license, permit or approval from the Public Service Commission or similar or related Michigan agency?

Thanks,
Stephen Lemont, Ph.D.
Environmental Project Manager
United States Nuclear Regulatory Commission
Office of New Reactors
Mail Stop: T-6D32
Washington, DC 20555-0001
Telephone: 301-415-5163
Fax: 301-415-6350
Email: Stephen.Lemont@nrc.gov
(See attached file: u-15896_12-23-2008.pdf)

Hearing Identifier: Fermi_COL_Public
Email Number: 484

Mail Envelope Properties (OFD2E5CF70.80BFB929-ON85257535.005226BD-85257535.0073DD17)

Subject: RE: Michigan Public Service Commission
Sent Date: 1/5/2009 4:05:32 PM
Received Date: 1/5/2009 4:05:39 PM
From: David B Harwood

Created By: harwoodd@dteenergy.com

Recipients:

"James R Padgett" <padgettj@dteenergy.com>
Tracking Status: None
"Randall D Westmoreland" <westmorelandr@dteenergy.com>
Tracking Status: None
"Peter W Smith" <smithpw@dteenergy.com>
Tracking Status: None
"Lemont, Stephen" <Stephen.Lemont@nrc.gov>
Tracking Status: None

Post Office: dteenergy.com

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MESSAGE	7965	1/5/2009 4:05:39 PM
u-15896_12-23-2008.pdf		140170

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
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STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter, on the Commission's own motion,)	
to implement the provisions of MCL 460.6s(10))	Case No. U-15896
and (11).)	
_____)	

At the December 23, 2008 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. Orjiakor N. Isiogu, Chairman
Hon. Monica Martinez, Commissioner
Hon. Steven A. Transeth, Commissioner

ORDER AND NOTICE OF OPPORTUNITY TO COMMENT

On October 6, 2008, Governor Jennifer M. Granholm signed into law 2008 PA 286 (Act 286), an amendment to 1939 PA 3. Section 6s of Act 286, MCL 460.6s, provides the option for a utility that seeks to add capacity to its system by construction, renovation, or long-term power purchase to seek one or more certificates of necessity from the Commission. If a utility seeks a certificate of necessity under this section, it must file an application with the Commission, along with an integrated resource plan.

Section 6s(10) provides that within 90 days of the effective date of the amendatory act, the Commission "shall adopt standard application filing forms and instructions for use in all requests for a certificate of necessity under this section." Section 6s(11) provides that the Commission "shall establish standards for an integrated resource plan that shall be filed by an electric utility requesting a

certificate of necessity under this section.” The subsections to Section 6s(11) describe seven parts that must be included in an integrated resource plan.

In compliance with the statutory requirement to adopt forms, instructions, and guidelines, the Commission hereby adopts the “Public Convenience and Necessity Application Instructions,” attached to this order as Exhibit A, and “Integrated Resource Planning Guidelines,” attached to this order as Exhibit B.

THEREFORE, IT IS ORDERED that “Public Convenience and Necessity Application Instructions,” attached to this order as Exhibit A, and “Integrated Resource Planning Guidelines,” attached to this order as Exhibit B, are adopted for purposes of implementing MCL 460.6s(10) and (11).

The Commission reserves jurisdiction and may issue further orders as necessary.

MICHIGAN PUBLIC SERVICE COMMISSION

Orjiakor N. Isiogu, Chairman

Monica Martinez, Commissioner

Steven A. Transeth, Commissioner

By its action of December 23, 2008.

Mary Jo Kunkle, Executive Secretary

**Michigan Public Service Commission
2008 PA 286**

**Filing Requirements and Instructions for Certificate of Public
Convenience and Necessity Application Instructions**

Application Instructions for Certificate Necessity

These filing instructions apply to an electric utility application for a Certificate of Necessity under the provisions of MCL 460.6s. The application shall be consistent with these instructions, with each item labeled as set out below. Any additional information considered relevant by the applicant may also be included in the application.

Pre-application Consultation Process

Prior to filing the application for a Certificate of Necessity, a pre-application consultation with Commission Staff is necessary. The purpose of the pre-application consultation is to help applicants refine the project application, and to facilitate efficient regulatory review. Applicants should schedule pre-application consultation meetings with Staff well in advance of filing an application with the PSC. Staff recognizes that all projects are not the same and that the information needed for one project will not necessarily be appropriate for the next. For some projects, a complete application may require less information than for other projects. For this reason, pre-application consultation with Staff is important. Early in the consultation process, Staff will identify Staff contacts, clarify the applicability of information requirements for the specific application.

I. Applicant Information

All applications shall contain the following information about the applicant utility.

Attachment A

1. The name and address of the applicant utility seeking the Certificate.
2. A description of the applicant utility, and the name, title and business address of a person to whom correspondence should be directed.

II. Alternate Standards and Criteria for Certain Projects

An electric utility with more than 1 million retail customers in this state seeking a certificate of necessity for a project costing more than \$500 million shall follow these instructions. An electric utility with less than 1 million retail customers in this state seeking a certificate of necessity for a project costing less than \$500 million may propose different review criteria and approval standards in its application, under MCL 460.6s(2), including modification or waiver of these instructions for good cause shown. The justification for any such proposals shall be addressed in the application. Project cost estimates submitted with the Certificate application do not require final bidding and contracts for project engineering, procurement and construction, and may include cost estimates developed in an alternative manner, along with a proposed contract strategy for project development and implementation.

III. Confidential Information

Proprietary, confidential, and other nonpublic materials filed as part of the application shall be clearly identified and marked accordingly and presented in such a way that the proprietary and confidential nature of the materials is preserved pending the execution of any confidentiality agreements and issuance of protective orders. Availability of specific materials in the application may be contingent upon appropriate confidentiality agreements and protective orders.

IV. Integrated Resource Plan

An Integrated Resource Plan as required by MCL 460.6s(11) shall be included as an exhibit to the certificate application. The plan shall include the items listed in MCL 460.6s(11) and otherwise comply with the Commission's standards developed under that section.

V. Certificate of Necessity Type

The Certificate of Necessity application shall identify the relief requested. An electric utility may seek one or more of the following Certificates as described in MCL 460.6s (3):

- A Certificate that the power to be supplied as a result of the proposed construction, investment, or purchase is needed.
- A Certificate that the size, fuel type, and other design characteristics of the existing or proposed electric generation facility or the terms of the power purchase agreement represent the most reasonable and prudent means of meeting that power need. A proposed action represents the most reasonable and prudent means of meeting the power need if the applicant presents evidence demonstrating that the proposed action is the most cost-effective means of meeting the power need, taking into account the cost of the proposal, the cost of alternatives to the proposal, and the risks associated with the proposal and with alternatives.
- A Certificate that the price specified in the power purchase agreement will be recovered in rates from the electric utility's customers.
- A Certificate that the estimated purchase or capital costs of the existing or proposed electric generation facility, including, but not limited to, the costs of siting and licensing a new facility and the estimated cost of power from the

new or proposed electric generation facility, will be recoverable in rates from the electric utility's customers.

VI. Certificate of Necessity that the power to be supplied as a result of the proposed construction, investment, or purchase is needed:

A utility seeking a Certificate of Necessity that the power to be supplied as a result of the proposed construction, investment, or purchase is needed shall file an application that identifies projected resource requirements, the expected timing of the requirements, along with an Integrated Resource Plan that identifies a proposed course of action.

VII. Certificate of Necessity that the design characteristics of a proposed electric generation facility or investment in an existing electric generation facility or the terms of a power purchase agreement represent the most reasonable and prudent means of meeting future power needs:

An application seeking a Certificate of Necessity to construct a new electric generation facility or to make a significant investment in an existing facility or enter in a power purchase agreement shall include the following information:

A. New or Existing Electric Generation Facility

1. A written description of the proposed or existing site, including identification of the municipality in which the facility will be constructed and the current use of that site.
2. If applicable, the age of the existing facility or facilities to be purchased or modified.

Attachment A

3. Expected Generating Technology and Major Systems (including major pollution control systems).
4. Expected nameplate capacity, availability, heat rates, expected life, and other significant operational characteristics.
5. Fuel Type and Sources, including the identification and justification of fuel forecasts used over the study period.
6. Discussion of rationale behind facility or investment technology, fuel, capacity, and other significant design characteristics.
7. A description of all major State, Federal, and Local permits required to construct and operate the proposed generation facility or the proposed facility upgrades in compliance with State and Federal environmental standards, laws, and rules.
8. If applicable, the status of any transmission interconnection study and identification of any expected or required transmission system modifications.
9. If applicable, natural gas infrastructure required for plant construction and operation not located on the proposed site but required for plant construction and operation.
10. If applicable, a description of modifications to existing road, rail, or water way transportation facilities not located on the proposed site but required for plant construction and operation.
11. If applicable, water and sewer infrastructure required for construction and operation not located on the proposed site but required for plant construction and operation.
12. A basic schedule for development and construction which include an estimated time between the start of construction and commercial operation of the facility or facility upgrades.

Attachment A

13. An estimate of the proportion of the construction workforce that will be composed of residents of the State of Michigan.
14. Descriptions of the supply alternatives to this proposal that were considered, including a “no-build” option, and present the justification for the choice of the proposed project. Comparative costs of supply alternatives shall be included. The supply alternatives shall consider energy optimization and renewable energy
15. Describe the effect of the proposed project on wholesale market competition.
16. Any other information that the applicant considers relevant.

B. Power Purchase Agreement

1. If applicable, a written description of generation facilities covered by the Power Purchase Agreement, the size of each facility, generator technology and fuel type, and the location of the generation facilities including identification of the municipalities in which the facilities are located.
2. The name and address of the power provider supplying contract products and services under the Power Purchase Agreement.
3. For Power Purchase Agreements that are the result of a competitive solicitation, the following shall be included in the Certificate application:

Attachment A

- a) A copy of the Request for Proposal (RFP) for Electric Capacity and a description of how the request was issued to potential respondents.
 - b) Copies of responses to the RFP. Responses submitted as part of a Certificate application may be presented in such a way that the identities of the respondents and other commercially sensitive information is protected.
 - c) A description of the proposal selection process.
4. The date the resources covered by the Power Purchase Agreement will be available, the term of the Power Purchase Agreement, and a description of significant contract provisions that could result in early termination of the contract.
 5. The price to be paid for contract products and services delivered under the Power Purchase Agreement
 6. A copy of the proposed Power Purchase Agreement.

VIII. Certificate of Necessity that the estimated capital or purchase costs of the new or existing electric generation facility or the investment in an existing electric generation facility will be recoverable in rates from the electric utility's customers:

An application seeking a Certificate of Necessity to construct a new electric generation facility, to make a significant investment in an existing electric generation facility, or to purchase an existing electric generation facility shall provide an estimate of the costs required for the specified purchase or construction as well as projected facility operation costs. Cost estimates filed with the Certificate application shall include:

A. Construction of new facility or investment in existing facility

1. To the extent applicable and available, engineering, procurement, and construction costs, transmission interconnection costs, owner's costs, and project financing costs shall be included. Estimates filed with the application that are the result of a competitively bid engineering, procurement, and construction contracts shall be separately identified. If the scope, scale, timing, or other aspects of the project including legislative or regulatory uncertainty make competitive bid solicitations unlikely to produce reliable or timely project cost estimates, the application shall include cost estimates developed in an alternative manner, along with a proposed contract strategy for project development and implementation.
2. For new construction, the Certificate application shall include the expected typical annual costs associated with operating the facility including fuel, operations and maintenance, and environmental compliance.
3. For investment and upgrades at an existing facility, the Certificate application shall include an estimate of the incremental operating costs for the facility after upgrades are complete including fuel, operations and maintenance, and environmental compliance.
4. To the extent applicable, the Certificate application shall describe any definitive joint ownership plans for the proposed generation facility assets and the impact such plans will have on the costs for which a Certificate of Necessity is requested. For the purposes of a Certificate application, changes in allocated costs among joint owners shall be considered an aspect of the estimated cost included in the filing.

B. Purchase of Existing Facility

1. As applicable, the estimated costs associated with purchasing the existing facility assets including the price to be paid for the assets, acquisition and transition costs, financing costs, and any significant financial liabilities that will accompany the asset transfer.
2. The expected typical annual costs associated with operating the generation facility including fuel, operations and maintenance, and environmental compliance.

IX. Certificate of Necessity that the price specified in the Power Purchase Agreement will be recovered in rates from the electric utility's customers:

A utility seeking rate recovery for future payments made pursuant to a Power Purchase Agreement shall file a Certificate application providing an estimate of the payments to be made for contract products and services pursuant to the agreement. The estimated payments shall be presented on a yearly basis in nominal dollars over the primary term of the contract.

Michigan Public Service Commission 2008 PA 286

Integrated Resource Planning Filing Guidelines

A. Planning Process and Modeling

An Integrated Resource Plan (IRP) shall cover a planning period of at least ten years. Documentation of the methodologies and materials used in the development of the Integrated Resource Plan shall be filed with the Commission.

The IRP shall include a description of the models, commercial and custom software applications, data providers, and other products that were used as part of the integrated resource planning process. Descriptions shall include the name of the company, governmental department, organization, or entity that developed the software or models, or current owner of the software or model licensing rights. The IRP shall also identify any consultants, contractors, or third parties utilized in the planning process.

B. Forecasts

The IRP shall include a forecast of economic indicators, electric load including customer load and sales by customer class, peak demand, available generation, fuel costs, and environmental costs. Sales and generation forecasts should include, as applicable, the effects of load management, demand response, electric choice participation, energy efficiency measures, net metering service, renewable portfolio standards, environmental limitations, planning reserve margins and system reliability requirements, and other legislative or societal developments that will likely impact future energy requirements.

For each reference forecast and any alternative forecasts the following shall be included:

1. A description of the models, methodologies, and software used to develop the forecast including data requirements, factors affecting model accuracy, and other critical factors affecting resulting forecast.
2. Include critical assumptions affecting the forecast data and methodology, and the sensitivity of the forecast to assumption variability.

C. Supply Resources

Existing Supply Resources:

The IRP filing shall include the following information for utility owned generation, and energy or capacity purchased through power purchase agreements:

1. Forecasted availability and seasonal net generating capacity of each supply resource.
2. Estimated future costs directly incurred that are associated with each supply resource including fuel, operations and maintenance, and environmental compliance.
3. If applicable, proposed or planned changes to existing generating capacity and associated costs, including: those changes and costs associated with the installation and operation of environmental protection facilities, those changes associated with proposed increases in fossil-fuel generation plant efficiencies, and/or any limitations on fossil-fuel generation plant capacities.
4. If applicable, assumptions regarding planning reserve margins and/or provision of ancillary services.

Potential Supply Resources:

The IRP filing shall include a description of the electric power resources considered for future service requirements. The quantity of energy from the supply resources considered during the integrated resource planning process shall not be limited by any minimum requirements set forth by law or commission order. The following information should be included for all potential resources considered in the integrated resource plan:

1. A description of the technologies considered for the new generation source, including the primary fuel and fuel alternatives, capacity, expected availability, and lead time for construction for each technology.
2. The estimated costs of developing potential generating resources including cost components attributable to plant capital costs, engineering, procurement, construction, financing, specific or generalized transmission upgrades, and owner's costs.
3. The estimated costs of operating potential generating resources including fuel, operations and maintenance, and environmental compliance.
4. A discussion of the commercial availability or developmental status of various generation technologies.
5. If applicable, a description of the renewable aspects of any supply side technology and how it will receive credit under any State or Federal Renewable Portfolio Standard requirement.

Transmission:

To the extent practicable, the IRP shall include an analysis of existing transmission import and export capability, proposed transmission projects, and the availability and economic impact of power imports and exports.

D. Demand Reduction Resources

The IRP shall consider Demand Reduction resources such as load management, demand response, energy efficiency, net metering service, and distributed generation as a means of affecting forecasted load requirements. The demand reduction resources considered during the integrated resource planning process shall not be limited to minimum requirements set forth by law or commission order.

Load Management/Demand Response

For load management and demand response programs, the following shall be included:

1. A description of potential and existing load management and demand response programs considered during the resource planning process, including affected customer end-uses and targeted customer classes.
2. Load management and demand response program costs including incentives, equipment, and acquisition costs.
3. Estimated or actual program participation and estimated or actual capacity, energy, and ancillary services savings per program.

Energy Efficiency

For energy efficiency programs, the following shall be included:

1. A description of potential and existing energy efficiency programs considered during the resource planning process, including affected customer end-uses and targeted customer classes.
2. Energy efficiency program costs including incentives, equipment, and acquisition costs.
3. Estimated or actual program participation and estimated or actual capacity, energy, and ancillary services savings per program.

Distributed Generation

The IRP shall provide a description of the existing and potential distributed generation resources considered for future service requirements. The summary of potential resources should include the following information:

1. A description of the distributed generation technology, primary fuel and fuel alternatives, capacity, and expected capacity factor.
2. Costs of developing, acquiring, or purchasing energy from distributed generation resources.
3. A discussion of the commercial viability, availability, or developmental status of distributed generation technologies.
4. If applicable, a description of the renewable aspects of the distributed generation resource and how it will receive credit under any State or Federal Renewable Portfolio Standard requirement.

E. Proprietary and Confidential Information

Proprietary, confidential, and other nonpublic materials used in the development of the forecasts, scenarios, or other aspects of the IRP should be presented in such a way that the proprietary and confidential nature of the materials is preserved.

Inclusion of specific materials in the IRP filing may be contingent upon appropriate confidentiality agreements and protective orders. Proprietary, confidential, and other nonpublic materials filed as part of the IRP shall be clearly designated by the applicant as confidential.

F. Legislation and Regulations

The IRP shall present in narrative form a discussion of likely or expected legislative or administrative activity that could result in changes to utility, energy market, or environmental regulatory rules and policies, and of regulatory uncertainty that may impact future operations. The filing shall also identify critical assumptions concerning these matters that underlie the IRP.

G. Scenarios and Risk Analysis

For the purposes of these guidelines, the reference scenario is defined as the set of assumptions and forecasts which are considered to be most probable. Scenario alternatives involve modification to critical assumption parameters defined in the Forecast, Supply Side or Demand Reduction Resource sections of the IRP.

Sensitivities involve analysis of the scenarios identified in the IRP under varying forecast sensitivities or combinations of forecast sensitivities as defined in the Forecast section of the plan.

The IRP shall include a discussion of each scenario analyzed, including:

1. Reference scenario assumptions and assumption changes under alternative scenarios.
2. Justification or context for assumption changes.
3. The sensitivities used for each scenario.
4. Discussion of the required resources under each scenario.

H. Proposed Course of Action

The filing shall identify the projected need for future energy resources due to load growth, changes to existing or available resources, legislative mandates, Commission orders, or other reasons identified during the integrated resource planning process and shall present the course of action which is considered to best satisfy those needs through the application of reliable and cost-effective measures with due consideration of the associated benefits and risk.

The proposed course of action shall include a description of the resources required for the plan, expected costs of the proposed resource additions, and tabular summaries of: the reference case results, the expansion plan timeline identified by the IRP, estimated yearly energy production by fuel type, a comparison of the projected present value of revenue requirements for future fixed cost expenditures associated with each proposed supply resource, and future variable cost expenses associated with meeting customer energy requirements for each alternative scenario over the course of the planning period. Sample Tables H-1 through H-5 have been provided for illustrative purposes. The IRP shall also present an estimated calculation of average customer rates as a result of the plan.

Attachment B

Proposed Course of Action Summary	
Assumption Summary	
Expected Annual Increase in Peak Demand (Without Plan)	
Expected Annual Increase in Customer Energy Requirements (Without Plan)	
Required Reserve Margin (%)	
Renewable Portfolio Standard Requirements	
Energy Efficiency Requirements	
CO ₂ Rules and Regulations	
Planned Changes to Capacity	
Additional Considerations	
...	
...	
Capacity Additions	
Supply Resource I (MW)	
Supply Resource II (MW)	
Supply Resource III (MW)	
Supply Resource IV (MW)	
Renewable Capacity (MW)	
Other (MW)	
TOTAL	
System Demand and Reserve Margin (With Plan)	
Annual Demand Growth (%)	
Annual Increase in Customer Energy Requirements (%)	
Reserve Margin With Plan (%)	
Plan Cost (Real Dollars - \$YEAR)	
NPV incremental fixed and variable revenue requirements	

Sample Table H-1: Reference Case Summary

Attachment B

Proposed Course of Action Capacity Expansion Plan by Planning Period Year (MW)										
RESOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	...	YEAR N-2	YEAR N-1	FINAL YEAR
Supply Resource I										
Supply Resource II										
Supply Resource III										
Supply Resource IV										
Renewable Capacity										
Demand Reduction Resource Impact										
TOTAL										

Sample Table H-2: Expansion Plan Timeline

Proposed Course of Action Estimated Generation by Planning Period Year (GWh)										
FUEL/RESOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	...	YEAR N-2	YEAR N-1	FINAL YEAR
Coal										
Natural Gas										
Nuclear										
Hydro										
Renewables										
Energy Efficiency Impact										
Other										

Sample Table H-3: Projected Generation by Fuel

Attachment B

Scenario Name		Planned Resources						
		Supply Resources (MW)				Demand Reduction Resources (MW)		
		Supply Resource I	Supply Resource II	Supply Resource III	Supply Resource IV	Renewable Capacity	Energy Efficiency	Load Management/ Demand Response
Reference Scenario								
Sensitivity Analyses	Sensitivity 1							
	Sensitivity 2							
	Sensitivity 3							
	Sensitivity 4							
Alternate Scenario A								
Sensitivity Analyses	Sensitivity A1							
	Sensitivity A2							
	Sensitivity A3							
	Sensitivity A4							
Alternate Scenario B								
Sensitivity Analyses	Sensitivity B1							
	Sensitivity B2							
Alternate Scenario C								
Sensitivity Analyses	Sensitivity C1							
	Sensitivity C2							
	Sensitivity C3							
Alternate Scenario D								
Alternate Scenario E								

Sample Table H-4: Alternative Scenario Resource Comparison

Attachment B

		Planned Resource Summary					Costs
Scenario Name		Capacity Added (Name Plate - MW)	Capacity Added (Firm- MW)	Net Demand Reduction (MW)	Peak Demand w/ Plan (MW)	Reserve Margin w/ Plan (%)	Projected PVRR (\$REAL)
Reference Scenario							
	Sensitivity 1						
	Sensitivity 2						
	Sensitivity 3						
	Sensitivity 4						
Alternate Scenario A							
	Sensitivity A1						
	Sensitivity A2						
	Sensitivity A3						
	Sensitivity A4						
Alternate Scenario B							
	Sensitivity B1						
	Sensitivity B2						
Alternate Scenario C							
	Sensitivity C1						
	Sensitivity C2						
	Sensitivity C3						
Alternate Scenario D							
Alternate Scenario E							

Sample Table H-5: Alternative Scenario Summary and PVRR Comparison

APPENDIX A – MCL 460.6S(11)

MCL 460.6s

THE COMMISSION SHALL ESTABLISH STANDARDS FOR AN INTEGRATED RESOURCE PLAN THAT SHALL BE FILED BY AN ELECTRIC UTILITY REQUESTING A CERTIFICATE OF NECESSITY UNDER THIS SECTION. AN INTEGRATED RESOURCE PLAN SHALL INCLUDE ALL OF THE FOLLOWING:

- (A) A LONG-TERM FORECAST OF THE ELECTRIC UTILITY'S LOAD GROWTH UNDER VARIOUS REASONABLE SCENARIOS.**
- (B) THE TYPE OF GENERATION TECHNOLOGY PROPOSED FOR THE GENERATION FACILITY AND THE PROPOSED CAPACITY OF THE GENERATION FACILITY, INCLUDING PROJECTED FUEL AND REGULATORY COSTS UNDER VARIOUS REASONABLE SCENARIOS.**
- (C) PROJECTED ENERGY AND CAPACITY PURCHASED OR PRODUCED BY THE ELECTRIC UTILITY PURSUANT TO ANY RENEWABLE PORTFOLIO STANDARD.**
- (D) PROJECTED ENERGY EFFICIENCY PROGRAM SAVINGS UNDER ANY ENERGY EFFICIENCY PROGRAM REQUIREMENTS AND THE PROJECTED COSTS FOR THAT PROGRAM.**
- (E) PROJECTED LOAD MANAGEMENT AND DEMAND RESPONSE SAVINGS FOR THE ELECTRIC UTILITY AND THE PROJECTED COSTS FOR THOSE PROGRAMS.**
- (F) AN ANALYSIS OF THE AVAILABILITY AND COSTS OF OTHER ELECTRIC RESOURCES THAT COULD DEFER, DISPLACE, OR PARTIALLY DISPLACE THE PROPOSED GENERATION FACILITY OR PURCHASED POWER AGREEMENT, INCLUDING ADDITIONAL RENEWABLE ENERGY, ENERGY EFFICIENCY PROGRAMS, LOAD MANAGEMENT, AND DEMAND RESPONSE, BEYOND THOSE AMOUNTS CONTAINED IN SUBDIVISIONS (C) TO (E).**
- (G) ELECTRIC TRANSMISSION OPTIONS FOR THE ELECTRIC UTILITY.**

Attachment B

APPENDIX B – Statutory Compliance Matrix

The table below provides a correlation between the individual sections of the Integrated Resource Planning Guidelines and the requirements set forth by MCL 460.6s(11).

MCL 460.6s(11) Subdivision	Statutory Requirement	Corresponding IRP Guideline Section or Sections
(A)	A long-term forecast of the electric utility's load growth under various reasonable scenarios	0,B,G
(B)	The type of generation technology proposed for the Generation facility and the proposed capacity of the generation facility, including projected fuel and regulatory costs under various reasonable scenarios.	B,C,H
(C)	Projected energy and capacity purchased or produced by the electric utility pursuant to any renewable portfolio standard.	C,D,H
(D)	Projected energy efficiency program savings under any energy efficiency program requirements and the projected costs for that program	D
(E)	Projected load management and demand response savings for the electric utility and the projected costs for those programs.	D
(F)	An analysis of the availability and costs of other electric resources that could defer, displace, or partially displace the proposed generation facility or purchased power agreement, including additional renewable energy, energy efficiency programs, load management, and demand response, beyond those amounts contained in subdivisions (c) to (e).	C,D
(G)	Electric transmission options for the electric utility.	C