SOUTH DAKOTA PUBLIC UTILITIES COMMISSION CASE NO. EL05-022

IN THE MATTER OF THE APPLICATION BY OTTER TAIL POWER COMPANY ON BEHALF OF THE BIG STONE II CO-OWNERS FOR AN ENERGY CONVERSION FACILITY SITING PERMIT FOR THE CONSTRUCTION OF THE BIG STONE II PROJECT

PREFILED REBUTTAL TESTIMONY

OF

ROBERT L. DAVIS

SENIOR DIRECTOR

R. W. BECK, INC.

JUNE 16, 2006



PREFILED REBUTTAL TESTIMONY OF ROBERT L. DAVIS

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BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

2 PREFILED REBUTTAL TESTIMONY OF ROBERT L. DAVIS

3 I. INTRODUCTION

1

- 4 O: Please state you name and business address.
- 5 A: My name is Robert L. Davis. My business address is 1000 Legion Place, Suite 1100,
- 6 Orlando, Florida 32801.
- 7 Q: Whom are you employed by and in what capacity?
- 8 A: I am a Senior Director at R. W. Beck, Inc., a nationally recognized independent
- 9 engineering and utility management consulting firm with headquarters in Seattle, Washington.
- 10 R. W. Beck was retained by Central Minnesota Municipal Power Agency (CMMPA) to assist
- 11 CMMPA with its application for an energy conversion facility siting permit for the construction
- of the Big Stone Unit II project in South Dakota and with its Certificate of Need filing for the
- 13 Big Stone Unit II Transmission project in the state of Minnesota. I am the lead project manager
- 14 for the most recent investigations and evaluations of load forecasts and resource expansion for
- the CMMPA members participating in both projects.
- 16 Q: What is your educational background and professional experience?
- 17 A: A biography of my educational background and professional experience is attached to
- this testimony as Applicants' Exhibit 47-A.
- 19 Q: Did you previously submit testimony in this proceeding?
- 20 A: No. However, I submitted direct testimony in the related transmission certificate of need
- 21 proceeding in Minnesota.

- 1 Q: Have you rendered testimony on electric utility matters in other proceedings?
- 2 A: Yes. I have rendered testimony and comments on issues pertaining to certificate of
- 3 needs, resource planning, demand-side management goals and plans, market power, and
- 4 Regional Transmission Organization ("RTO") formation before the states of Texas, Florida,
- 5 South Carolina, and the Federal Energy Regulatory Commission. A summary of my curriculum
- 6 vitae is attached to this testimony as Applicants' Exhibit 47-B.
- 7 Q: Who do you represent in this proceeding?
- 8 A: In this proceeding, I am testifying on behalf of CMMPA, and through CMMPA, thirteen
- 9 municipal electric systems located in the southern portion of the State of Minnesota that have
- 10 elected to participate jointly through CMMPA to acquire an undivided ownership interest in the
- 11 proposed construction and operation of Big Stone Unit II project and transmission
- interconnection facilities proposed in this proceeding.
- The twelve participating members of CMMPA in these projects are: the City of Blue
- 14 Earth, MN; the City of Delano, MN; the City of Fairfax, MN; the City of Glencoe, MN; the City
- of Granite Falls, MN; the City of Janesville, MN; the City of Kasson, MN; the City of Kenyon,
- 16 MN; the City of Mountain Lake, MN; the City of Sleepy Eye, MN; the City of Springfield, MN;
- and the City of Windom, MN.
- Through CMMPA, I am also representing the City of Willmar, Minnesota, which is not a
- 19 member of CMMPA, but which is participating jointly with the other twelve members of
- 20 CMMPA to acquire an undivided ownership interest in the proposed construction and operation
- 21 of Big Stone Unit II and transmission interconnection facilities. Throughout this testimony,
- 22 I will only be addressing issues as they pertain to these thirteen municipal participants in the Big

- 1 Stone Unit II project. Hereafter, these thirteen municipal utilities will be referred to as the
- 2 CMMPA Members.
- 3 II. PURPOSE AND SUMMARY OF TESTIMONY
- 4 Q: What is the purpose of your testimony?
- 5 A: I will respond on behalf of CMMPA Members to the May 26, 2006 testimony of
- 6 Minnesota Center for Environmental Advocacy (MCEA) witnesses Schlissel and Sommers with
- 7 regard to the need for capacity and issues relating to resource planning, specifically as these
- 8 topics refer to the CMMPA Members.
- 9 III. NEED FOR AND TIMING OF CAPACITY
- 10 Q: At pages 5 and 6 of their May 26 testimony, MCEA witnesses Schlissel and
- 11 Sommers state that CMMPA does not need additional capacity in 2011. Do you agree?
- 12 A: No. As demonstrated in Applicants' Exhibit 47-C, the most recent analysis of resource
- 13 capacity and peak demand projections developed for the CMMPA Members confirms that the
- 14 CMMPA Members will need capacity additions by 2008. Capacity deficiencies in 2008 and
- 15 2009 are projected to be rather small; however, by 2011, without the addition of the Big Stone
- 16 Unit II, the reserve margin for the CMMPA Members is projected to fall below 10 percent.
- 17 Q: Please briefly describe the analysis recently undertaken by you with respect to the
- 18 CMMPA Member load forecast and resource expansion analysis.
- 19 A: Under my direct supervision, two interrelated analyses were undertaken by R. W. Beck:
- 20 first was an econometric analysis and forecast of demand and energy requirements. Second, we
- 21 performed an optimized generation resource expansion and demand-side management screening
- 22 analysis. The load forecast utilized generally-accepted electric utility industry practices to

- develop separate projections of net energy for load, or NEL, for each of the CMMPA Members.
- 2 Historical data and forecasts of major economic indicators, such as population, gross domestic
- 3 product, retail sales, and personal income for the Minnesota counties of the members were
- 4 combined with historical heating and cooling degree-day weather indicators and projections of
- 5 normal weather conditions to develop the annual projections. These annual NEL projections
- 6 were assessed in the context of other historical information on annual peak demands and monthly
- 7 and hourly loads to develop projections of monthly energy and peak demands and a coincident
- 8 peak demand forecast for the CMMPA Members.
- 9 Q: What are the major findings of the load forecast analysis?
- 10 A: NEL and peak demands of the CMMPA Members are projected to grow at annual growth
- 11 rates of approximately 1.5 percent over the twenty year period from 2006 through 2025.
- 12 Primarily following the forecast trends for major economic indicators used to develop the
- forecast, load growth rates for the CMMPA Members are projected to decline over time, with
- growth rates of approximately 1.6 percent over the first decade of the forecast period (2006
- through 2015), declining to approximately 1.4 percent over the second decade of the forecast
- period (2016 through 2025). The annual coincident peak demand of the CMMPA Members is
- 17 projected to be 177 MW by the summer of 2011 (the summer immediately following the
- anticipated commercial operating date for the Big Stone Unit II). A detailed discussion of the
- methodology and results of the load forecast analysis can be found in the attached Applicants'
- 20 Exhibit 47-C, Resource Expansion Analysis Big Stone Unit II Participating Members.
- 21 Q: Please describe the analysis recently undertaken by you with respect to the
- 22 projections of resource expansion for the CMMPA Members?

1 As previously mentioned, under my supervision two interrelated analyses were A: 2 undertaken by R. W. Beck. The second of these analyses, an optimized generation resource 3 expansion and demand-side management screening analysis, was undertaken to identify one or 4 more potential resource expansion plans that could satisfy the multiple objectives of meeting a 5 reasonable 15 percent reserve margin above the coincident peak demands forecast for the 6 CMMPA Members, while minimizing total costs of generation production, operation and 7 maintenance, and capital investments in new resources. The first task for this analysis was an 8 investigation of the existing and firmly planned resources of the CMMPA Members and 9 comparison of these resources to forecast coincident peak demands. Through this investigation, 10 I identified the dates when capacity additions would be required by the CMMPA Members. 11 Q: Based on the results of the load forecast and the existing and planned resources of 12 the CMMPA Members, when will the members need to add new capacity resources? 13 A: Assuming a 15 percent planning reserve margin is applied to the forecast of coincident 14 peak demands for the CMMPA Members, the members are first in need of capacity additions in 15 2008. Capacity deficiencies in 2008 are projected to be rather small (less than 2 MW), and 16 capacity needs are projected to increase only slightly in 2009 as certain purchase power contracts 17 are set to expire and other planned resources are scheduled to come online. However by 2011, 18 without the addition of the CMMPA Members' shares of Big Stone Unit II, the reserve margin 19 for the CMMPA Members is projected to fall below 10 percent. Capacity needs are projected to

grow by an average of 3.5 MW per year thereafter. By 2025, if no capacity other than currently

planned amounts are added, the CMMPA Members would need approximately 58 MW of

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capacity additions.

1 IV. RESOURCE PLANNING

2 Q: At pages 23 and 32 of their May 26 testimony, MCEA witnesses Schlissel and

3 Sommers state that CMMPA considered only fossil-fueled alternatives and did not consider

4 renewable or demand-side alternatives as potential alternatives to the Big Stone Unit II

5 Project. Do you agree?

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A: No. The recent resource expansion analysis conducted for the CMMPA Members considered wind resources along with fossil-fueled resources as expansion alternatives. In addition to the 30 MW of Big Stone Unit II capacity that the CMMPA Members are acquiring, the resource expansion analysis considered combined-cycle and simple-cycle resources fired with natural gas; a supercritical pulverized coal steam resource fired with sub-bituminous coal; an integrated gasification combined-cycle resource fired on sub-bituminous coal; and a multiple-turbine wind resource facility. Because additional quantities of the Big Stone Unit II above the 30 MW currently secured by the CMMPA Members may become available if changes

With regard to demand-side alternatives, the resource expansion analysis considered demand-side resources in two ways. First, the load forecast for the CMMPA Members was developed from historical levels of NEL and peak demand. Any reductions attributable to historical implementations of demand-side programs were, therefore, included in the data used to derive the econometric load forecast. In this way, historical levels of demand-side program reductions and growth in such reductions are implicitly removed from the forecast demands used to establish the future capacity need of the CMMPA Members. Second, the resource expansion

in participant status occur in the future, an additional 30 MW of Big Stone Unit II capacity was

also evaluated for its potential cost-effective adoption by the CMMPA Members.

- 1 analysis included an evaluation of demand-side programs to determine whether demand-side
- 2 alternatives were more or less costly than the supply-side expansion alternatives.
- 3 Q: At page 8 of their May 26 testimony, MCEA witnesses Schlissel and Sommers state
- 4 that the Big Stone II Co-Owners have not shown that the Big Stone II resource is the lowest
- 5 cost option as compared to portfolios of renewable and demand side alternatives. Do you
- 6 agree?
- 7 A: No. In the recent resource expansion analysis conducted for the CMMPA Members –
- 8 potential resource expansion plans were developed using an impartial process that considered
- 9 both traditional and renewable resource alternatives. Furthermore, demand-side programs
- 10 consistent with costs and load impacts of the existing demand-side programs implemented by the
- 11 CMMPA Members were evaluated against an expansion plan that included the Big Stone Unit II
- 12 project to assess whether it would be less expensive for the CMMPA Members to implement
- demand-side programs or build the Big Stone Unit II project.
- 14 Q: Please briefly describe the resource expansion analysis, attached as Applicants'
- 15 **Exhibit 47-C.**
- 16 A: The resource expansion analysis was performed using the generation and demand-side
- 17 planning optimization analysis software package Strategist, which R. W. Beck licenses from
- 18 New Energy Associates, a Siemens Company. Strategist employs a dynamic programming
- 19 optimization technique combined with a convolution generation dispatch process to approximate
- 20 the operation of generating resources and power purchases and sales for electric utilities.
- 21 Through the dynamic optimization process, Strategist explores all potential generation expansion
- 22 plans that can be produced from a given set of resource alternatives and identifies the best

- candidate plans based on the planning objectives identified by the user. For this analysis, I relied
- 2 upon two primary objectives. First, the CMMPA Members must meet a minimum 15 percent
- 3 reserve margin beginning in 2011. Second, the optimum resource plans must provide for the
- 4 lowest projected utility costs of all possible alternatives over a 25-year study period from 2011
- 5 through 2035. Potential resource plans were ranked from lowest to highest cost based on a
- 6 computation of total, present value costs, including generation production costs, operating and
- 7 maintenance costs, and capital costs for the CMMPA Members over the 25-year study period.
- 8 The computation of present-value costs also included a quantification of costs beyond the study
- 9 period, commonly referred to as end effects.
- 10 Q: From your analysis, which potential resource plan was found to produce to lowest
- 11 projected costs for the CMMPA Members?
- 12 A: A resource expansion plan consisting of the planned 30 MW of the Big Stone Unit II in
- 2011, plus an additional 10 MW of installed wind capacity in 2011, followed by 10 MW of
- supercritical pulverized coal capacity installed every two to three years beginning in 2019, was
- 15 found to be the least-cost potential resource expansion plan. A detailed discussion of the
- methodology and results of the resource expansion analysis, including a collection of the lowest
- 17 cost resource plans that were evaluated, can be found in the attached Applicants' Exhibit 47-C.
- 18 Q: Did you analyze resource expansion cases with significantly more renewable
- resources than the lowest-cost plan?
- 20 A: Yes. Over 400 discrete resource expansion case alternatives were evaluated as part of the
- 21 Strategist analysis. While many of these cases were subtle variations on the lowest-cost plan,
- 22 many sub-optimal plans were also evaluated. As indicated in Applicant's Exhibit 47-C, sub-

- optimal plans that included greater quantities of wind generation resulted in higher total costs for
- 2 power supply for the CMMPA Members.
- 3 Q: What were the results of your investigation to add more than the planned 30
- 4 megawatts of the Big Stone Unit II capacity?
- 5 A: At least 30 additional megawatts of capacity from Big Stone Unit II could be cost-
- 6 effectively added by the CMMPA Members in 2011. This case is not currently contemplated as
- 7 a resource expansion alternative because all of the proposed Big Stone Unit II capacity is already
- 8 allocated to the Big Stone Unit II partners. However, should additional capacity from the Big
- 9 Stone Unit II become available, the resource expansion analysis found that additional quantities
- 10 of the Big Stone Unit II capacity would provide for lower total present value costs for the
- 11 CMMPA Members as compared with the lowest-cost plan described previously. While the
- 12 reserve margin for the CMMPA Members would obviously far exceed the 15 percent target
- under this case, the lower-cost results of this case can be understood when compared to the
- existing resource alternatives of the CMMPA Members. The CMMPA Members rely heavily on
- market-priced non-firm and economy purchases, and generation from owned lower-efficiency
- steam resources and oil-fired diesel generation to serve their loads. In contrast, savings in energy
- 17 costs the CMMPA Members could receive through low-cost energy available from the proposed
- 18 Big Stone Unit II are projected to offset the incremental fixed and capital costs associated with
- 19 the additional Big Stone Unit II capacity, resulting in lower total costs for power than what is
- available from their existing resources.

- 1 V. DEMAND-SIDE MANAGEMENT (DSM)
- 2 Q: At page 34 of their May 26 testimony, MCEA witnesses Schlissel and Sommers state
- 3 that CMMPA did not compare demand-side measures against supply-side resources. Do
- 4 you agree?
- 5 A: No. In the most recent resource expansion analysis performed for the CMMPA
- 6 Members, demand-side programs were compared against the lowest-cost resource expansion
- 7 plan, which includes the Big Stone Unit II project, to determine whether the demand-side
- 8 programs would result in lower total costs for the CMMPA Members as compared to an
- 9 expansion plan without demand-side programs.
- 10 Q: How was this analysis of demand-side programs performed and what were the
- 11 results?
- 12 A: Demand-side programs were evaluated incrementally against the lowest cost of the
- 13 generating resource expansion cases (the addition of 30 MW of Big Stone Unit II capacity in
- 14 2011 along with 10 MW of wind capacity 2011 and future additions of coal capacity). Average
- demand-side program costs and energy and demand benefits were estimated from Conservation
- 16 Improvement Program reports filed by the CMMPA Members with the Minnesota Department of
- 17 Commerce and other estimates provided by the CMMPA Members. Incremental demand-side
- program costs and load reductions for the CMMPA Members were compared against the best
- 19 generating resource expansion case to determine whether incremental reductions in energy
- 20 production costs and avoided generation capacity costs attributable to the demand-side programs
- 21 would be greater than the cost of the demand-side programs.

- The results of this analysis reveal that the average cost per demand and energy reduction resulting from the CMMPA Member demand-side programs is higher than the marginal avoided costs of generation production and capacity. These results indicate that the existing demand-side programs of the CMMPA Members cause higher total and average operating costs for the members than would otherwise occur if no demand-side programs were implemented by the members and that any increase in funding and implementation of the current demand-side
- 8 Q: Does this conclude your prepared testimony?

programs of the members would not be cost-effective.

9 A: Yes.

7

BIOGRAPHY

ROBERT L. DAVIS SENIOR DIRECTOR R. W. BECK, INC.

Mr. Davis, a Senior Director with R. W. Beck, Inc., has over twenty years of experience in electric industry planning and operation. Since joining R. W. Beck in 1990, he has been responsible for various electric industry studies relating to wholesale power markets, power and demand-side planning, generation simulation, risk and probabilistic analyses, RFP development and evaluation, and power supply contracting. His experience encompasses fuel procurement, IPP/cogen assessment, alternative generation technology evaluation, wholesale and retail rate design, utility cost of service analyses, load and customer forecasting, customer surveying, and financial reporting for revenue bond and capital market issuance.

Over the last several years, Mr. Davis has been responsible for leading the firm's deregulated wholesale market analyses throughout much of Eastern North America, including the development of market simulation models to forecast and analyze future power prices, market transactions, project revenue, portfolio values, stranded costs, and market uncertainty. He has investigated and advised clients on issues they will face under deregulation, including the potential timing, structure, and operation of deregulated bulk power markets. Mr. Davis has performed economic feasibility studies investigating the development or acquisition of tens of thousands of megawatts of generating capacity throughout North America and over the last two years was the lead market analyst supporting the successful financing of several billion dollars of generation projects.

Mr. Davis has developed several comprehensive integrated resource plans for utilities balancing objectives of lowest utility operating costs, acceptable risk, and minimization of adverse retail rate impacts. Mr. Davis has submitted testimony before state and federal regulatory bodies and presented findings and conducted training workshops on resource planning and marketing plans to utility staff and management, citizen groups, governing boards, and utility commissions.

Prior to joining R. W. Beck, Mr. Davis worked for five years as a utility analyst in the Strategic Planning Department of a Gainesville Regional Utilities, a municipal electric, natural gas, water and wastewater utilities system located in the north-central Florida, where he was responsible for the design, evaluation, and monitoring of DSM programs. While at the University of Florida pursuing a BS degree in Engineering Sciences and Mechanics, Mr. Davis focused on an interdisciplinary study of alternative energy production technologies and engineering mathematics. Prior to beginning his professional career, his experience included research and development of state residential building codes and energy auditing of utility customers.



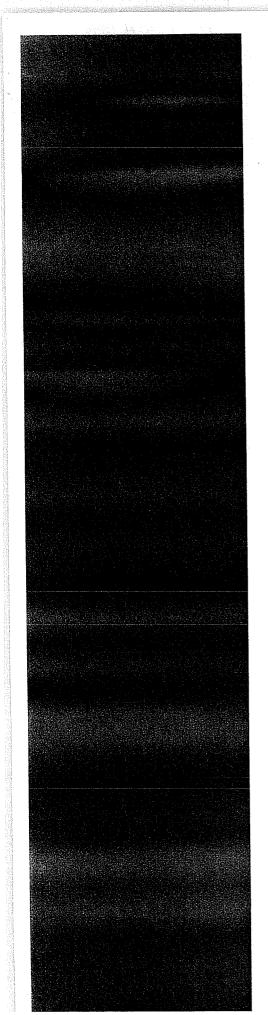
CURRICULUM VITAE

FORUM PROCEEDING MATTER		MATTER	PETITIONER	SUBJECT	DATE	
Florida Public Service Commission	Docket No. 020233-EL	GridFlorida RTO Cost/Benefit Analysis Workshop	Seminole Electric Cooperative, Inc. and Florida Municipal Power Agency	Filed comments and testimony before the FPSC on the GridFlorida RTO costbenefit study results, including identification of methodological weaknesses, tlawed assumptions, erroneous results	2005	
Service 020233-EL Cost/Benefit Analysis Commission Workshop FI		Seminole Electric Cooperative, Inc. and Florida Municipal Power Agency	Filed comments and testimony before FPSC on proposed GridFlorida RTO cost/benefit analysis, including identification of concerns, requests for information, and recommendations for study modifications	2004		
Federal Energy Docket Nos. Regulatory ER99-3427-000 Legilatory and ER00-2398-000 Legilate		Triennial Market Power Update		d SOWEGA Power evaluation in compliance		
Public Service Commission of the State of South Carolina Docket No. 2001-411-E Application for Certificate of Environmental Compatibility and Public Convenience and Necessity		Greenville County Power, LLC	Testimony on state and regional market assessment for determination of need for generating capacity in support of power plant siting	2001		
Florida Public Docket No. Petition for Determination of Need for the Osprey Energy Center in Polk County		Seminole Electric Cooperative and Calpine Construction Finance Company, L.P.	Preparation of filed exhibits for power plant siting, determination of generation capacity need	2000/ 2001		
Florida Public Service Commission	Docket No. 000289-EU Petition for Determination of Need for an Electrical Power Plant in Lake County		Panda Leesburg Power Partners, L.P.	Filed testimony for power plant siting and economic and reliability assessment for determination of generation need	2000	
Florida Public Service Commission	Docket No. 000288-EU	Petition for Determination of Need for an Electrical Power Plant in St. Lucie County	Panda Midway Power Partners, L.P.	Filed testimony for power plant siting and economic and reliability assessment for determination of generation need	2000	



CURRICULUM VITAE (CONT.)

FORUM	PROCEEDING	MATTER	PETITIONER	SUBJECT	DATE
Public Utility Commission of Texas	SOAH Docket No. 473-95-1820, PUC Docket No. 15100	Determinations Required by 32K of the Public Utility Holding Act and for Certification of Contract	Electric Cooperative,	Independent performance and evaluation of power and demand-side RFPs	1995/ 1996
		Florida Municipal Power Agency and Ocaia Electric Utility	Evaluation of demand-side management measure cost-effectiveness and establishment of numeric goals	1995	
Florida Public Service Commission	Docket No. 950455-EG	Adoption of Numeric Conservation Goals and Consideration of National Energy Policy Act	City of Vero Beach, Florida	Evaluation of demand-side management measure cost-effectiveness and establishment of numeric goals	1995



REPORT

Resource Expansion Analysis Big Stone II Participating Members

Central Minnesota Municipal Power Agency

Prepared by

R. W. Beck, Inc.

JUNE 1, 2006





Resource Expansion Analysis in Support of CMMPA Big Stone II Certificate of Need

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This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to R. W. Beck, Inc. (R. W. Beck) constitute the opinions of R. W. Beck. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, R. W. Beck has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. R. W. Beck makes no certification and gives no assurances except as explicitly set forth in this report.

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EXECUTIVE SUMMARY

R. W. Beck, Inc. ("R. W. Beck") was retained by Central Minnesota Municipal Power Agency ("CMMPA") to develop a load forecast and resource expansion analysis for the thirteen municipal utilities that CMMPA is representing in the Big Stone II Project certificate of needs filings in the states of Minnesota and South Dakota. CMMPA, collectively with six other owner-participants in the Big Stone II Project, submitted its application for a certificate of need in the State of Minnesota on September 30, 2005 (the "Application"). The analyses undertaken by CMMPA in support of the Application were reviewed by the Minnesota Department of Commerce ("DOC"), which recommended that certain aspects of the analyses and supporting documentation submitted by CMMPA in the Application be revised. provided certain recommendations to improve the analysis conducted by CMMPA, which, to paraphrase the DOC recommendations, suggested that CMMPA redress two primary areas of the analysis: (i) the techniques used to develop the load and demand forecast should be more comprehensive, and (ii) a more rigorous optimization technique should be used to examine potential resource expansion plans. This report addresses these recommendations.

On behalf of CMMPA, R. W. Beck performed two interrelated studies, which results are summarized and the methodology and assumptions are documented herein. These studies were:

- A econometric forecast of demand and energy for each of the municipal electric systems of which CMMPA is representing in the Application; and
- A resource expansion analysis, incorporating the results of the load forecast, using an industry-accepted resource expansion optimization software program.

These analyses were conducted for a composite of thirteen municipal electric systems located in the southern and central portions of the State of Minnesota that have elected to participate jointly through CMMPA to acquire an undivided ownership interest in the proposed construction and operation of the Big Stone II Project. Twelve of these entities are current members of CMMPA:

City of Blue Earth, MN ("Blue Earth")
City of Delano, MN ("Delano")
City of Fairfax, MN ("Fairfax")
City of Glencoe, MN ("Glencoe")
City of Granite Falls, MN ("Granite Falls")
City of Janesville, MN ("Janesville")
City

City of Kasson, MN ("Kasson")
City of Kenyon, MN ("Kenyon")
City of Mountain Lake, MN ("Mountain Lake")
City of Sleepy Eye, MN ("Sleepy Eye")
City of Springfield, MN ("Springfield")
City of Windom, MN ("Windom")

The thirteenth entity included in the analysis is the City of Willmar, Minnesota, which though not a member of CMMPA, is participating jointly with the other twelve members of CMMPA to acquire an undivided ownership interest in the proposed Big



Stone II Project. Throughout this report, these thirteen municipal electric systems are collectively referred to as the Big Stone II Members.

The results of the load forecast indicate that NEL and peak demands of the CMMPA Members are projected to grow at annual growth rates of approximately 1.5 percent over the twenty year period from 2006 through 2025. Primarily following the forecast trends for major economic indicators used to develop the forecast, load growth rates for the Big Stone II Members are projected to decline over time, with growth rates of approximately 1.6 percent over the first decade of the forecast period (2006 through 2015), declining to approximately 1.4 percent over the second decade of the forecast period (2016 through 2025). The annual coincident peak demand of the Big Stone II Members is projected to be 177 megawatts by the summer of 2011, the summer immediately following the anticipated commercial operating date for the Big Stone Unit II.

Assuming a 15 percent planning reserve margin is applied to the forecast of coincident peak demands for the CMMPA Members, the members are first in need of capacity additions in 2008. Capacity deficiencies in 2008 are projected to be rather small (less than 2 megawatts), and capacity needs are projected to increase only slightly in 2009 as certain purchase power contracts are set to expire and other planned resources are scheduled to come online. However, by 2011, without the addition of the Big Stone Unit II, the reserve margin for the CMMPA Members is projected to fall below 10 percent. Capacity needs are projected to grow by an average of 3.5 megawatts per year thereafter. By 2025, if no capacity other than currently planned amounts is added, the CMMPA Members would need approximately 58 megawatts of capacity additions.

To satisfy this projected need, a resource expansion analysis was undertaken to identify a least-cost resource plan. Over 400 potential expansion plans were developed in the resource expansion analysis. The three plans that ranked lowest in present value cost were identified as the optimum least-cost plans as shown in Table ES-1. The present value utility cost variance shown in the table represents the incremental cost increase for each plan from the lowest-cost plan. All three of the optimum least-cost expansion plans indicate that the Big Stone II Members need to secure 30 MW of Big Stone Unit II capacity in 2011.

- Plan 1, consisting of the planned 30 megawatts of the Big Stone Unit II in 2011, plus an additional 10 megawatts of installed wind capacity in 2011, followed by 10 megawatts of supercritical pulverized coal capacity installed every two to three years beginning in 2019, was found to be the least-cost potential resource expansion plan. Based on the results of this plan, wind turbine capacity of approximately 10 MW is a viable resource option for the Big Stone II Members in 2011. This amount of wind capacity is approximately equal to the Renewable Energy Objective of the Big Stone II Members for 2012.
- Plan 2 delays the installation of the 10 MW wind unit 9 years until 2020 and moves the first 10 MW supercritical coal unit one year forward to 2018. The incremental cost increase from Plan 1 was less than \$1 million.

■ Plan 3 differs from Plan 1 by replacing the final 10 MW of supercritical coal capacity addition in 2035 with 10 MW of IGCC capacity. The incremental cost increase from Plan 1 was \$3.4 million.

Table ES-1: Optimum Least-Cost Potential Expansion Plans

Year of Installation	Plan 1	Plan 2	Plan 3	
2011	BS II (30MW) Wind (10MW)	BS II (30MW)	BS II (30MW) Wind (10MW)	
2018	_	Coal (10MW)	_	
2019	Coal (10MW))	-	Coal (10MW)	
2020	_	Wind (10MW)	_	
2021	Coal (10MW)	Coal (10MW)	Coal (10MW)	
2023	Coal (10MW)	Coal (10MW)	Coal (10MW)	
2026	Coal (10MW)	Coal (10MW)	Coal (10MW)	
2029	Coal (10MW)	Coal (10MW)	Coal (10MW)	
2032	Coal (10MW)	Coal (10MW)	Coal (10MW)	
2035	Coal (10MW)	Coal (10MW)	IGCC (10MW)	
V Utility Cost Variance (2006 \$000)	-	954	3,400	

At least 30 additional megawatts of capacity from Big Stone Unit II could be costeffectively added by the Big Stone II Members in 2011. This case is not currently contemplated as a resource expansion alternative because all of the proposed Big Stone Unit II capacity is already allocated to the Big Stone II partners. However, should additional capacity from the Big Stone Unit II become available, the resource expansion analysis found that additional quantities of the Big Stone Unit II capacity would provide for lower total present value costs for the Big Stone II Members as compared with the lowest-cost base plan described previously. While the reserve margin for the Big Stone II Members would obviously far exceed the 15 percent target under this case, the lower-cost results of this case can be understood when compared to the existing resource alternatives of the Big Stone II Members. The Big Stone II Members rely heavily on market-priced non-firm and economy purchases, and generation from owned, lower-efficiency steam resources, and oil-fired diesel generation to serve their loads. In contrast, savings in energy costs the Big Stone II Members could receive through low-cost energy available from the proposed Big Stone Unit II are projected to offset the incremental fixed and capital costs associated with the additional Big Stone Unit II capacity, resulting in lower total costs for power than what is available from their existing resources.

CONCLUSIONS

The resource expansion modeling demonstrates that growth in member and changes in planned capacity results in the need for new capacity additions for the Big Stone II Members in the near future. To meet this need, the Big Stone II Members will need to acquire new capacity resources. Evaluations of available and possible resource alternatives indicate that Big Stone Unit II is a viable, low-cost means for the Big Stone II Members to meet this need. Furthermore, the beneficial results produced by acquiring 30 MW of Big Stone Unit II capacity above the current allocation of the Big Stone II Members underscores the need of the members to obtain low-cost, baseloaded capacity.

Section 1 INTRODUCTION

DESCRIPTION OF CMMPA

Central Minnesota Municipal Power Agency ("CMMPA") is a not-for-profit municipal corporation and political subdivision of the State of Minnesota, headquartered in Blue Earth, Minnesota. CMMPA was formed in 1987 and currently has 14 members (the "Members"), as listed below.

- City of Blue Earth, MN ("Blue Earth")
- City of Delano, MN ("Delano")
- City of Fairfax, MN ("Fairfax")
- City of Glencoe, MN ("Glencoe")
- City of Granite Falls, MN ("Granite Falls")
- City of Janesville, MN ("Janesville")
- City of Kasson, MN ("Kasson")
- City of Kenyon, MN ("Kenyon")
- City of Lake Crystal, MN ("Lake Crystal")
- City of Mountain Lake, MN ("Mountain Lake")
- City of New Ulm, MN ("New Ulm")
- City of Sleepy Eye, MN ("Sleepy Eye")
- City of Springfield, MN ("Springfield")
- City of Windom, MN ("Windom")

CMMPA is responsible for supplying project power to the Members, who in turn provide low-cost, reliable electric energy and related services directly to customers across south and central Minnesota. Utilities Plus, a power marketing company wholly-owned by CMMPA, assists the Members with the purchase and sale of capacity and energy on a short term or other basis, as requested, and arranges for transmission services for such purchases and sales. The Members rely on Utilities Plus to dispatch the various member resources together with purchases from the market to minimize their total power costs.

CMMPA is a project agency and, as such, CMMPA members determine individually which projects to pursue. Twelve of the CMMPA members – namely, Blue Earth, Kasson, Delano, Kenyon, Fairfax, Mountain Lake, Glencoe, Sleepy Eye, Granite



Falls, Springfield, Janesville, and Windom – have elected to participate jointly through CMMPA to acquire an undivided ownership interest in the proposed construction and operation of the Big Stone II Project. Additionally, the City of Willmar, Minnesota, which is not a member of CMMPA, is participating jointly with these twelve members of CMMPA to acquire the undivided ownership interest in the Big Stone II Project. The twelve CMMPA members and the City of Willmar have signed a power sales agreement with CMMPA to acquire a collective 5.0 percent (approximately 30 MW) ownership interest in Big Stone Unit II.

Throughout this report, the thirteen municipal electric systems are collectively referred to as the Big Stone II Members. All of the loads of CMMPA Big Stone II Members are served in Minnesota.

DESCRIPTION OF THE PROJECT

Big Stone Unit II is a second generating unit planned for construction adjacent to Otter Tail Power Company's ("Otter Tail") Big Stone Unit I located near Big Stone City, South Dakota. The Big Stone II Project (the "Project") entails the construction of the Big Stone Unit II and associated transmission facilities. The six utilities currently participating in the development of the Project along with CMMPA are Otter Tail, Great River Energy, Heartland Consumers Power District, Missouri River Energy Services, MDU Resources Group, and Southern Minnesota Municipal Power Agency (the "Participants"). The Big Stone Unit II is assumed to be a supercritical pulverized coal unit with a total generating capacity of approximately 600 MW. Subject to permitting, commercial operation is scheduled for the spring of 2011.

PURPOSE OF THE ANALYSIS

CMMPA, along with the other Participants, is in the process of filing for a Certificate of Needs for the Project in the state of Minnesota. In accordance with Minnesota Public Utility Commission Rule 7849, one of the requirements for receiving a Certificate of Need involves the demonstration that the Project (or portion thereof, depending on what facilities are located within the state) is the lowest cost option for meeting future power supply requirements. The resource expansion analysis documented herein (the "Analysis") is intended to provide the documentation necessary to show that the Project is the lowest cost resource alternative for the Big Stone II Members.

OBJECTIVES

The resource planning objectives of the Big Stone II Members adopted for this analysis are as follows:

• Objective 1: Maintain the adequacy and reliability of power supply. To meet this goal, load projections were first developed for the Big Stone II Members, including an additional 15% for planning reserves. Current plans for

resource additions and retirements were then reflected in the analysis. Based on these investigations, the Big Stone II Members are projected to begin experiencing capacity deficiencies by the summers of 2008. Short-term capacity purchases could cover deficiencies early on, but load growth and additional purchase power contract terminations are projected to cause capacity deficiencies to gradually increase over time.

- Objective 2: Keep CMMPA wholesale rates as low as possible. One of the primary objectives of the Analysis was to analyze potential resource plans that would minimize the overall long-term power supply costs to the Big Stone II Members. Resource expansion modeling was performed to identify the resource plan(s) that are projected to produce the lowest present value generation production, fixed, and capital costs for the Big Stone II Members. The analysis examined various potential resource combinations over the 2011 through 2035 timeframe.
- Objective 3: Minimize adverse socioeconomic and environmental effects. The resource expansion analysis utilized Commission-approved environmental externality prices and considered expected costs for mercury and SO2 allowances when computing the least-cost plan. Additionally, wind resources and demand-side management ("DSM") programs were analyzed during the analysis of resource expansion alternatives.

METHODOLOGY

The Analysis was comprised of two primary components, which are summarized below and documented more fully in the following sections of the report.

LOAD FORECAST

A forecast of peak load and net energy requirements for the Big Stone II Members was developed for a 20 year period, beginning fiscal year 2006 through 2025. The load forecast utilized generally-accepted electric utility industry practices to develop separate projections of net energy load for each of the Big Stone II Members. Historical data and forecasts of major economic indicators such as population, gross domestic product, retail sales, and personal income for the Minnesota counties of the Big Stone II Members were combined with historical heating and cooling degree-day weather indicators and projections of normal weather conditions to develop the annual projections. These annual NEL projections were assessed in the context of other historical information on annual peak demands and monthly and hourly loads to develop projections of monthly energy and peak demands and a coincident peak demand forecast for the Big Stone II Members.

RESOURCE EXPANSION ANALYSIS

A resource expansion analysis was performed using the dynamic programming optimization feature of New Energy Associates' Strategist software package.

Potential resource plans developed in the Strategist software were ranked based on the present value total generation production costs and incremental fixed O&M and capital costs for new resource additions. Present value costs were computed over a 25 year planning horizon (2011 through 2035, the "Planning Period"), with end effects being computed for an additional thirty years beyond the Planning Period. Unless currently scheduled for retirement, the existing Big Stone II Member resources were assumed to remain available over the Planning Period. Generic generating resources and the Big Stone II Member portion of the Big Stone Unit II were modeled and made available for Strategist to select from when meeting future capacity and energy requirements.

PRINCIPAL CONSIDERATIONS

In preparing the Analysis, as summarized in this report, we have made certain assumptions with respect to conditions that may occur in the future. These assumptions primarily relate to economic, demographic, weather, commodity price, and costs conditions. With regard to certain of these factors, we have relied upon information provided to us or prepared by others. While we believe the assumptions made by us in preparing the Analysis are reasonable for the purposes of the forecast and projections herein, they are dependent on future events, and actual conditions may differ from those assumed. While we believe the sources of the information provided to us, or prepared by others, to be reliable and the use of such information to be reasonable for the purposes of the forecast and projections herein, we offer no other assurances with respect thereto.

To the extent that economic, demographic, weather, commodity price, costs, or other conditions occur that are different from those assumed by us or from the information provided to us or prepared by others, actual events can be expected to vary from the forecast and projections herein. It should be emphasized that the confidence associated with any forecast varies inversely with the length of the forecast horizon. The probability of other factors affecting forecasted values increases with uncertainty about future developments; this uncertainty increases with the length of the forecast horizon. With this in mind, the Analysis should be seen as providing reasonable estimates of future demand events for the purposes for which the Analysis is intended; which estimates are subject to the future effects of factors that cannot be reasonably foreseen at this time.

Section 2 LOAD FORECAST

OVERVIEW

R. W. Beck has prepared a forecast of peak load and net energy requirements for the Big Stone II Members ("2006 Load Forecast"). A load forecast is a critical input to many utility processes including, but not limited to, generation resource planning, fuel and purchased power budgeting, transmission planning, and financial planning and budgeting. In addition, this forecast constitutes a critical part of Resource Expansion Analysis and Certificate of Need filings of CMMPA in support of the Big Stone II Project. Consequently, a rigorous forecasting process which relies on recognized standards of practice, high quality data, and a thorough review of results by various parties is essential to operations and long-term planning.

The 2006 Load Forecast has been prepared for a 20 year period, beginning fiscal year 2006 through 2025. The Forecast relies on annual, monthly, and hourly load data that were obtained from CMMPA staff and supplemented by Energy Information Administration Form 861 records. Historical and projected economic and demographic data for the counties that surround the Big Stone II Members were provided by Economy.com, a nationally-recognized provider of such data. Beck has also relied on CMMPA staff for information regarding local economic developments and other issues specific to each Big Stone II Member. Weather data was provided by the National Oceanic and Atmospheric Administration ("NOAA") for the Minneapolis-St. Paul airport weather station, a National Weather Service office in close proximity to all of the Big Stone II Members.

The results of the Forecast imply that the total energy requirements of the Big Stone II Members is expected to grow at an annual average rate of 1.6 percent from 2006-2015 and 1.4 percent from 2016-2025. On a normal weather basis, the projected total energy requirements and coincident peak for 2006 are 770 GWh and 162.9 MW, respectively. The aggregate coincident peak of the Big Stone II Members typically occurs in the summer, and more often in July than other summer months.

FORECAST METHODOLOGY

The 2006 Load Forecast relies on a bottoms-up approach in which forecasts of the Big Stone II Members are prepared independently and summed to represent the total of the Big Stone II Members. The following sections provide some detail regarding the analytical steps and calculations that were involved in producing the results.



Forecast of Energy Requirements

A forecast of the annual energy requirements of each Big Stone II Member was developed based on an econometric model that generally utilized historical data over the period 1990 through2005. All other forecasted load determinants (e.g., monthly energy requirements, monthly and annual peak demand, etc.) are derived from annual energy requirements. Thus, annual energy requirements are the only directly-forecasted load determinant.

Econometric forecasting makes use of regression to establish historical relationships between energy consumption and various explanatory variables based on fundamental economic theory and experience. In this approach, the significance of historical relationships and validity of resulting models are evaluated using commonly accepted statistical measures and tests (e.g., standard error, adjusted R-squared, Schwarz Information Criterion, LJung-Box test, etc.). Models that, in the view of the analyst, best explain the historical variation of energy consumption are selected. These historical relationships are generally assumed to continue into the future, barring any specific information or assumptions to the contrary. The selected models are then combined with projections of the explanatory variables, resulting in a projection of energy requirements.

Econometric forecasting can be a more reliable technique for long-term forecasting than trend-based approaches and other techniques, because the approach results in an explanation of variations in load rather than simply an extrapolation of history. As a result of this approach, utilities are better able to anticipate departures from historical trends in energy consumption, given accurate projections of the driving variables. In addition, understanding the underlying relationships which affect energy consumption allows utilities to perform scenario and risk analyses, thereby improving decisions.

Econometric modeling was not done nor were forecasts developed at the retail sales level for the Big Stone II Members as data of sufficient detail or of a sufficiently lengthy historical period were not available for such an analysis. In addition, it was felt that any available data was unlikely to be of a high enough quality to support a rigorous analysis.

Similarly, although R. W. Beck recognizes that the price of electricity and of alternative fuels may have an impact on electric usage, data was not sufficiently available to support an extension of the econometric models in that regard. Moreover, any impact that might occur from potentially higher electricity prices are believed to be small and to occur over a long period, such that the forecast would be unlikely to be affected significantly.

Model Specification

The general form of the regression equations used in the 2006 Forecast is typically referred to as a double-log transform. In this functional form, the dependent variable is the natural log of the series of interest, in this case energy requirements for each of the Big Stone II Members, expressed as a function of the natural log of some or all of the explanatory variables. This formulation accomplishes three objectives:

- 1. It allows for the multiplicative combination of factors that tend to affect electric usage in an interactive way (e.g., the amount of living area under space conditioning and ambient temperature),
- 2. It guarantees constant elasticity (defined below) through time, and
- 3. It allows for a direct comparison of model parameters among segments of the study and against economic theory (e.g., price elasticity of demand is typically between 0 and -1, or inelastic).

Elasticity is measured by the percentage change in the variable being explained (e.g., energy requirements) that results from a one percentage change in the value of a given explanatory variable. Elasticities represent useful shorthand for understanding the impact of the external variables on energy requirements and are directly comparable among the Big Stone II Members. For example, the model coefficient on cooling degree days should be similar among the Big Stone II Members. Significant variations in the weather coefficients should be a function of differences in customer characteristics for the most part and/or may alert the forecast analyst to data quality issues.

Frequently, theory or evidence does not support constant elasticity across the range of values for an explanatory variable. In those cases, however, an effort should be made to explicitly derive a relationship that is consistent with theory and fits the data well. The double-log transform sometimes results in an improvement in load forecasting equations simply by avoiding the potential problem of instability in the estimated impact of explanatory variables across time due to the fact that electric load typically grows through time. Coefficients on weather variables in a strictly linear model, for example, may tend to under-represent the influence of weather as load grows.

Table 2-1 below shows the variables used and the estimated parameter of each variable in the forecast model of each Big Stone II Member's energy requirements, where:

GDP = gross domestic product in the county surrounding the Member

PY = total personal income in the county surrounding the Member

RETSAL = total retail sales in the county surrounding the Member

CDD = cooling degree days for the Minneapolis-St. Paul airport

 $\mathbf{HDD} = \mathbf{heating} \ \mathbf{degree} \ \mathbf{days} \ \mathbf{for} \ \mathbf{the} \ \mathbf{Minneapolis-St.} \ \mathbf{Paul} \ \mathbf{airport}$

Year>2004 = a binary variable set to 0 for 1990-2003 and 1 for 2004

AR(1) = an auto-regressive term providing a correction factor based on prioryear model residuals.

Table 2-1: Summary of Estimated Forecast Model Parameters for Big Stone II Members

			Estim	ated Param			
			Retail	x10	5 [1]	Year >	
Member	GDP PY	PΥ	Sales	CDD	HDD	2003	AR(1)
Blue Earth	0.52			8.57	2 60		
Delano			0.95	7.57			
Fairfax	0.16			2.73	5.35		
Glencoe		1.15		10.74	3.05	(0.12)	
Granite Falls		0.34		8.99	1.68		
Janesville			0.70	15.60			
Kasson		1 21		11.47	5.39		
Kenyon		1.13		8.86	2.34		0.57
Mountain Lake	0.84			34.03			
Sleepy Eye	0.49			8.91	1.44		
Springfield			0.60	13.92		0.06	
Willmar		1 01		6.59	3.52		
Windom	0.28			7.68			0.87

^[1] Weather coefficients reflect the estimated percentage change in energy requirements from a one point change in degree days rather than from a percentage change in degree days.

The economic variable used in each model was chosen on the basis of the best statistical results, as measured by adjusted R-squared and Schwarz Information Criterion, and the most sensible resulting forecast, in consultation with CMMPA staff. The binary variable above, YEAR>2003, was added in the case of Glencoe to account for the loss of a major industry in 2004 and in the case of Springfield to account for an increase in energy requirements that could not be accounted for by other variables. While the use of such an adjustment is somewhat ad hoc, it should be recognized that the forecast team had very little information regarding the activity of large industrial customers that make up a large portion of the retail load of some Big Stone II Members. In addition, the economic data on which these models are estimated are subject to potentially large revisions on a significantly lagged basis, up to 5 years or more. Hence, late-period residuals can be caused by inaccurate estimates of the economic data during those periods.

In the case of Mountain Lake, the forecast reflects an upward adjustment in the level of energy requirements throughout the forecast horizon to avoid a large negative differential between the last historical data point and the forecast. This differential is due to the impact of weather normalization and the abnormally large coefficient on cooling degree days (shown in the table above), as the last historical year has significantly higher cooling degree days than normal. While there may be higher cooling load on Mountain Lake's system as a result of some industry with refrigeration requirements, for example, it was felt that the abnormally large coefficient was more likely a function of the timing of residuals associated with the city's small size and relatively large industrial load.

Appendix A contains the model estimation output for each of the Big Stone II Members. These tables are preceded by a key defining abbreviation and variable name conventions used throughout the appendix. The energy requirements data and explanatory variables are shown in detail in Figures 2-1 and 2-2 and Tables 2-2 through 2-8, which are located at the end of this section. In addition, Appendix B

contains the full detail of net energy for load and peak demand forecast results by individual Big Stone II members.

Projection of Monthly Peak Demand

Projections of summer and winter non-coincident peak ("NCP") demand for each Big Stone II Member were developed by applying projected annual load factors to forecasted energy requirements. The projected load factors are generally based on the average relationship between annual energy requirements and the seasonal peak demand generally over the period 1996-2005 (i.e., a 10-year average).

Monthly peak demand is based on the average relationship between each monthly peak and the appropriate seasonal peak. This average relationship was computed after ranking the historical demand data within the summer and winter seasons and reassigning peak demands to each month based on the typical ranking of that month compared to the seasonal peak. This process avoids distortion of the averages due to randomness as to the months in which peak weather conditions occur within each season. For example, a summer peak period can occur during July or August of any year. It is important that the shape of the peak demands reflects that only one of those two months is the peak month and that the other is typically some percentage less.

Each Big Stone II Members' contribution to the total peak demand of the aggregate Big Stone II Members' load (i.e., coincident peak demand) were derived from monthly NCP demand and assumed coincidence factors generally based on an average of such factors over a 5-year period (2001-2005). These historical coincidence factors are based on coincident peak demand data that was computed from hourly load data maintained by CMMPA. Hourly load data was not available prior to 2001. As a result, coincident peak demand and coincidence factor data was not available prior to 2001 to allow for a longer period of averaging of such factors.

DATA SOURCES

Historical Member Load Data

Historical annual energy requirements and summer and winter NCP demand were obtained from Energy Information Administration Form 861 reports for the period 1990-2004. Data for 2005 was obtained from CMMPA. Separate data on monthly energy requirements and peak demand was also obtained from CMMPA and was generally based on hourly load data maintained by CMMPA, supplemented in some cases by data provided by the Members. Given that the hourly load data was based on a SCADA system and was impacted in some cases by generation behind the metering point, this data was not used to forecast annual energy requirements and summer and winter NCP demand. Instead, it was only used to develop the monthly profile of energy requirements and peak demand. In addition, the hourly load data was analyzed and adjusted to correct for large deviations from sensible daily load patterns via the use of proxy historical daily profiles for days with similar weather conditions.

Weather Data

Historical weather data was obtained from the National Oceanic and Atmospheric Administration for Minneapolis-St. Paul airport, a National Weather Service office in close proximity to all of the Big Stone II Members. Projected weather conditions are based on normal heating and cooling degree days most recently published by NOAA, which generally reflect average weather conditions over 1971-2000. Appendix C contains a table and a graphic showing historical and normal annual HDD and CDD used in the Forecast.

Economic Data

Economy.com, a nationally recognized provider of economic data, provided both historical and projected economic and demographic data. The data relied on includes economic and demographic data for the 11 counties in which the Big Stone II Members' service territories reside. These data include population, households, employment by major industry classification, personal income in total and by source, retail sales, and gross domestic product. Although all data was not necessarily utilized in each of the forecast equations, each was examined for its potential to explain variations in each Big Stone II Member's energy requirements.

Appendix D contains tables that provide the economic data relied on for this forecast, as well as representative growth rate statistics. A table is provided for each of the 13 Big Stone II Members, with the Member and county name shown at the top, but two of the tables are essentially duplicates as two of the Big Stone II Members reside in the same county.

PRINCIPAL CONSIDERATIONS AND ASSUMPTIONS

The development of the 2006 Load Forecast was based upon the following principal consideration and assumptions:

- The service territories of the Big Stone II Members will continue to experience moderate economic growth in a relatively stable economy.
- The future influence on energy requirements of the economic, demographic, and weather factors, on which the econometric models are based, was assumed to be similar to the estimated influence of such factors generally over the period 1990 through 2005.
- Although the econometric models implicitly account for the historical relationships between energy usage and the following factors to the extent they have occurred in the past, the 2006 Load Forecast does not explicitly reflect extraordinary potential future effects of: (a) increases in appliance design efficiency or building insulation standards; (b) development of substitute energy sources; (c) consumers switching to traditional or new types of electrical appliances from other alternatives (e.g., electric vehicles); (d) consumers switching from electrical appliances to other alternatives; or (e) variations in load that might result from legal, legislative, regulatory, or policy actions.

- To the extent the Big Stone II Members have affected their load characteristics or growth through load management, conservation, rate setting, or economic development programs in the recent past, such effects are implicitly reflected in these results based on the modeling techniques used in the 2006 Load Forecast. However, we have not assumed or modeled any additional impacts of existing or new load control or load enhancement programs.
- The recent average historical relationships between annual summer and winter non-coincident demands and annual energy requirements and between monthly NCP demands and annual winter and summer NCP demands were assumed to represent reasonable approximations of such future relationships.

Figure 2-1: Historical and Projected Net Energy for Load

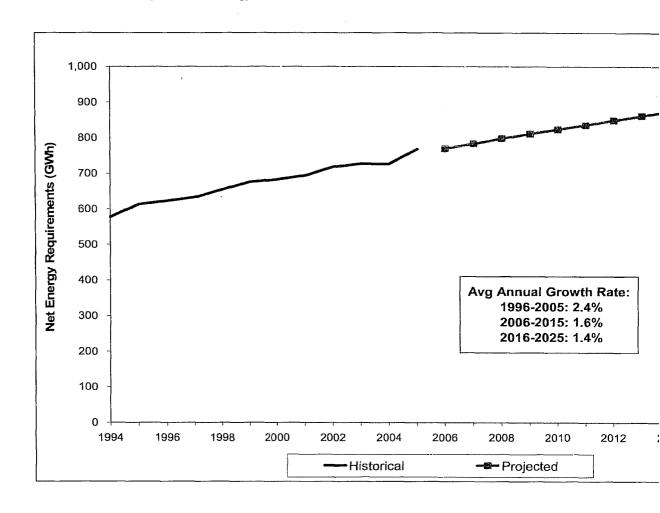


Figure 2-2: Historical and Projected Coincident-Peak Demand

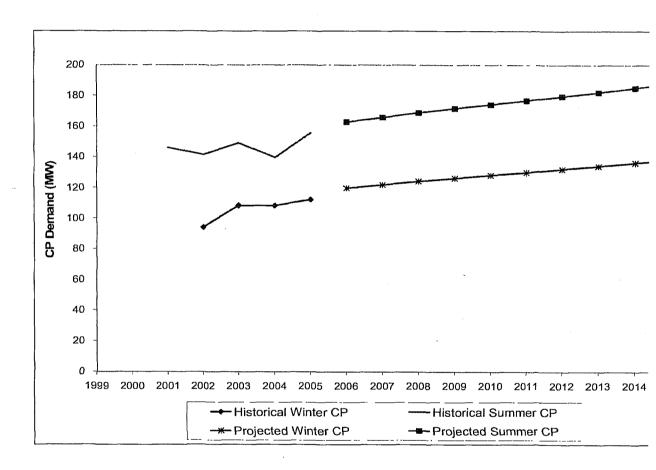


Table 2-2: Historical and Projected Total Net Energy Requirements and Peak Demand

			Net Energ	y Regulreme	ents (CY)			Non-	Coinciden	t Peak Dem	and			Co	incident Pea
	•	Actual		Normalized		Percent	Winter	Percent	Load	Summer	Percent	Load	Winter	Percent	Load S
	Year	(MWh)	Change	(MWh)	Change	Diff	(MW)	Change	Factor	(MW)	Change	Factor	(MW)	Change	Factor
_	1996	622,946	-	617,996		-0 8%	105 9	-	67 1%	139 8	-	50 9%	N/A	-	N/A
	1997	632,123	1 5%	635,270	28%	0 5%	103 9	-1 9%	69 5%	141 9	1 5%	50 8%	N/A	N/A	N/A
	1998	654,282	3 5%	672,778	5 9%	2 8%	108 9	4 8%	68 6%	150 0	5 7%	49 8%	N/A	N/A	N/A
m	1999	675,672	3 3%	689,436	2 5%	2 0%	109 7	0 8%	70 3%	156 5	4 3%	49 3%	N/A	N/A	N/A
Ę	2000	682,841	1 1%	690,464	0 1%	1 1%	1137	3 6%	68 6%	150 3	-3 9%	51 9%	N/A	N/A	N/A
Historical	2001	693,711	1 6%	693,422	0 4%	0 0%	114 1	0 4%	69 4%	163 4	8 7%	48 5%	N/A	N/A	N/A
Ξ	2002	717,929	3 5%	708,678	2 2%	-1 3%	110 8	-2 9%	73 9%	159 9	-2 2%	51 3%	94 2	N/A	87 0%
	2003	727,173	1 3%	722,673	2 0%	-0 6%	113 1	2 1%	73 4%	164 7	3 0%	50 4%	108 5	15 2%	76 5%
	2004	726,518	-0 1%	744,531	3 0%	2 5%	114 4	1 2%	72 5%	158 1	-4 0%	52 5%	108 5	0.0%	76 4%
_	2005	768,482	5 B%	765,923	29%	-0 3%	1186	3 6%	74 0%	163 5	3 4%	53 7%	112 4	36%	78 0%
	2006	769,811	0 2%	769,811	0 5%		123 3	4 0%	71 3%	169 6	37%	51 8%	119 9	66%	73 3%
	2007	783,689	18%	783,689	1 8%		125 5	1 8%	71 3%	172 6	1 8%	51 8%	122 0	1 8%	73 3%
	2008	798,434	1 9%	798,434	1 9%		127 9	19%	71 3%	175 8	1 8%	51 9%	124 3	19%	73 3%
	2009	811.734	17%	811,734	17%		130 0	1 7%	71 3%	178 7	1 6%	51 9%	126 4	17%	73 3%
	2010	824,033	1 5%	824,033	1 5%		132 0	1 5%	71 3%	181 3	1 5%	51 9%	128 3	1 5%	73 3%
	2011	836,221	1 5%	836,221	1 5%		134 0	1 5%	71 3%	184 0	1 5%	51 9%	130 2	1 5%	73 3%
	2012	849,063	1 5%	849,063	1 5%		136 0	1 5%	71 3%	186 8	1 5%	51 9%	132 2	1 5%	73 3%
	2013	861,892	1 5%	861,892	1 5%		138 1	1 5%	71 3%	189 6	1 5%	51 9%	134 2	1 5%	73 3%
B	2014	875,488	1 6%	875,488	16%		140 2	1 6%	71 3%	192 6	1 6%	51 9%	136 3	16%	73 3%
ថ្ល	2015	888,468	1 5%	888,468	1 5%		142 3	1 5%	71 3%	195 4	1 5%	51 9%	138 4	1 5%	73 3%
Projected	2016	901,220	1 4%	901,220	1 4%		144 3	1 4%	71 3%	198 2	1 4%	51 9%	140 3	1 4%	73 3%
0_	2017	914,102	1 4%	914,102	1 4%		146 4	1 4%	71 3%	201 0	1 4%	51 9%	142 3	1 4%	73 3%
	2018	926,916	1 4%	926,916	1 4%		148 4	1 4%	71 3%	203 7	1 4%	51 9%	144 3	1 4%	73 3%
	2019	939,398	1 3%	939,398	1 3%		150 4	1 3%	71 3%	206 4	1 3%	51 9%	146 3	1 3%	73 3%
	2020	952,032	1 3%	952,032	1 3%		152 4	1 3%	71 3%	209 2	1 3%	52 0%	148 2	1 3%	73 3%
	2021	964,837	1 3%	964,837	1 3%		154 4	1 3%	71 3%	212 0	1 3%	52 0%	150 2	1 3%	73 3%
	2022	977,989	1 4%	977,989	1 4%		156 5	1 3%	71 3%	214 8	1 3%	52 0%	152 3	1 4%	73 3%
	2023	991,419	1 4%	991,419	1 4%		158 6	1 4%	71 4%	217 7	1 4%	52 0%	154 4	1 4%	73 3%
	2024	1,004,730	1 3%	1,004,730	1 3%		160 7	1 3%	71 4%	220 6	1 3%	52 0%	156 4	1 3%	73 3%
_	2025	1,018,182	1 3%	1,018,182	1 3%		162 9	1 3%	71.4%	223 5	13%	52 0%	158 5	1 3%	73 3%
Œ	Thru 2005		24%	ı	24%			1 3%	70 7%		1 8%	50 9%		6 1%	N/A
AAGR	2006-2015		1 6%	ı	1 6%			1 6%	71 3%		1 6%	51 9%		16%	73 3%
⋖	2016-2025		1 4%	II.	1 4%			1 4%	71 3%		1 3%	52 0%		1 4%	73 3%

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1996	N/A	N/A	N/A	N/A	N/A	N/A						
	1997	N/A	N/A	N/A	N/A	N/A	N/A						
	1998	N/A	N/A	N/A	N/A	N/A	N/A						
75	1999	N/A	N/A	N/A	N/A	N/A	N/A						
ř	2000	N/A	N/A	N/A	N/A	N/A	N/A						
Historical	2001	N/A	N/A	N/A	N/A	N/A	N/A						
Ï	2002	N/A	N/A	N/A	N/A	N/A	N/A						
	2003	N/A	N/A	N/A	N/A	N/A	N/A						
	2004	63,192	57,587	57,671	51,948	54,008	59,376	69,707	64,628	65,872	60,277	58,622	63,631
-	2005	64,272	54,827	60,413	54,738	56,670	68,763	77,594	75,967	68,546	60,075	59,606	67,011
	2006	64,872	57,584	60,891	55,437	57,009	65,591	77,659	75,392	67,295	61,742	60,451	65,889
	2007	66,051	58,634	61,990	56,450	58,041	66,770	79,052	76,737	68,494	62,849	61,538	67,083
	2008	67,305	59,750	63,160	57,529	59,141	68,024	80,528	78,157	69,761	64,029	62,696	68,353
5	2009	68,438	60,758	64,216	58,501	60,132	69,155	81,861	79,436	70,901	65,094	63,741	69,502
Projected	2010	69,485	61,690	65,192	59,401	61,050	70,200	83,092	80,617	71,954	66,079	64,708	70,565
ġ	2011	70,521	62,612	66,158	60,291	61,957	71,236	84,314	81,795	73,004	67,053	65,664	71,615
ď.	2012	71,610	63,581	67,174	61,226	62,910	72,327	85,604	83,045	74,120	68,077	66,669	72,720
	2013	72,698	64,549	68,190	62,161	63,864	73,416	86,892	84,293	75,233	69,099	67,673	73,823
	2014	73,853	65,577	69,268	63,153	64,876	74,571	88,253	85,613	76,409	70,183	68,739	74,993
	2015	74,955	66,560	70,298	64,101	65,843	75,672	89,551	86,871	77,529	71,218	69,757	76,111
•	2016	76,038	67,525	71,311	65,033	66,793	76,755	90,826	88,107	78,630	72,235	70,758	77,209
	2017	77,132	68,500	72,333	65,975	67,753	77,848	92,114	89,354	79,740	73,263	71,769	78,319
	2018	78,222	69,471	73,352	66,912	68,709	78,936	93,394	90,593	80,843	74,285	72,776	79,423
B	2019	79,283	70,418	74,344	67,826	69,640	79,994	94,640	91,801	81,917	75,280	73,757	80,500
Projected	2020	80,357	71,376	75,350	68,750	70,582	81,065	95,900	93,023	83,004	76,286	74,750	81,590
Ğ	2021	81,446	72,347	76,369	69,687	71,538	82,151	97,177	94,261	84,105	77,306	75,756	82,694
4	2022	82,564	73,344	77,415	70,650	72,519	83,266	98,488	95,534	85,237	78,354	76,790	83,828
	2023	83,706	74,362	78,483	71,632	73,521	84,405	99,828	96,833	86,392	79,424	77,845	84,986
	2024	84,838	75,372	79,543	72,607	74,515	85,533	101,154	98,119	87,536	80,485	78,892	86,134
	2025	85.982	76.393	80.614	73.592	75.519	86 674	102 494	99.419	88 691	81 557	79 951	B7 295

Table 2-4: Monthly Energy Allocation Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
77	1999	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Historical	2000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
캃	2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ï	2002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2003	N/A	, N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2004	8.7%	7.9%	7 9%	7.2%	7.4%	8 2%	9 6%	8.9%	9.1%	8.3%	8 1%
	2005	8 4%	7 1%	7 9%	7 1%	7 4%	8 9%	10 1%	9 9%	8 9%	7 8%	7 8%
	2006	8.4%	7.5%	7 9%	7.2%	7 4%	8 5%	10 1%	9 8%	8.7%	8.0%	7.9%
	2007	8 4%	7 5%	7 9%	7 2%	7 4%	8 5%	10.1%	9 8%	8 7%	8.0%	7 9%
	2008	8.4%	7 5%	7.9%	7 2%	7 4%	8 5%	10.1%	9 8%	8 7%	8 0%	7 9%
þ	2009	8.4%	7 5%	7.9%	7 2%	7 4%	8.5%	10 1%	9.8%	8 7%	8 0%	7 9%
Projected	2010	8.4%	7 5%	7 9%	7 2%	7 4%	8.5%	10 1%	9.8%	8.7%	8 0%	7 9%
è	2011	8 4%	7.5%	7 9%	7 2%	7.4%	8 5%	10.1%	9.8%	8 7%	8.0%	7 9%
à	2012	8.4%	7 5%	7 9%	7.2%	7.4%	8 5%	10 1%	9 8%	8.7%	8.0%	7 9%
	2013	8.4%	7 5%	7 9%	7 2%	7 4%	8 5%	10 1%	9 8%	8 7%	8.0%	7.9%
	2014	8.4%	7.5%	7.9%	7 2%	7 4%	8 5%	10.1%	9 8%	8.7%	8 0%	7.9%
	2015	8 4%	7.5%	7 9%	7 2%	7 4%	8 5%	10.1%	9 8%	8.7%	8 0%	7 9%
Avg.	1996-2005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ŕ	2006-2015	8.4%	7 5%	7 9%	7 2%	7 4%	8 <u>5</u> %	10 1%	9.8%	8.7%	8.0%	7 9%

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Table 2-5: Monthly Non-Coincident Peak Demand (MW)

_	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
_	1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	≀N/A	N/A	N/A	N/A
	1998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
īg	1999	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ë	2000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Historical	2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ξ	2002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2003	112.1	113 1	108 6	106.9	105 7	140 7	150 2	164.7	142.0	116 5	109 4	114 4
	2004	1143	1110	105.7	108.0	108 5	142.3	158 1	145 9	151 3	117 1	109 6	118 6
_	2005	1163	111 2	106 5	105 0	1053	158.2	160 1	1 <u>63</u> 5	144 2	120 2	113 7	122.5
_	2006	123 3	119.4	114 1	109 9	1156	155 3	169 6	162 7	151 4	122.9	119.3	124.0
	2007	125 5	121.6	1162	111.9	117.7	158.1	172.6	165 7	154 1	125 1	121.6	126.3
	2008	127.9	123.9	118.4	114 0	120.0	161 0	175,8	168.7	157 0	127.5	123.6	128.5
Ö	2009	130.0	125.9	120.4	116.0	122.0	163 7	178.7	171.5	159 5	129.6	125 5	130.4
Projected	2010	132.0	127.9	122.2	117.7	123.8	166 1	181 3	174.1	161.9	131 6	127.4	132 3
÷	2011	134.0	129 7	124 0	119 5	125 7	168 6	184 0	176.6	164.3	133 5	129 3	134 4
Ď.	2012	136 0	131 7	125.9	121 3	127.6	171 1	186 8	179.4	166 8	135 5	131 2	136 4
	2013	138 1	133 7	127 8	123 2	129.5	173.7	189.6	182 1	169 4	137 6	133 3	138 5
	2014	140.2	135.8	1298	125 1	131 6	176 4	192.6	184 9	172 0	139.7	135.3	140.5
_	2015	142.3	137 8	131 7	127.0	133 5	178 9	195 4	187 6	174.5	141.8	137 2	142 5
	2016	144.3	139 8	133 6	128.8	135.4	181.5	198.2	190.3	177.0	143 8	139 1	144 5
	2017	146.4	141.8	135.5	130 6	137.3	184.0	201 0	193 0	179.5	145 9	141.1	146.6
	2018	148.4	143 7	137 4	132.4	139 2	186 6	203.7	195 6	182 0	147.9	143 0	148.5
g	2019	150.4	145.7	1393	134.2	141 1	189 0	206.4	198.2	184.4	149.9	144 9	150 5
Projected	2020	152.4	147 6	141 1	136 D	143.0	191.5	209.2	200.9	186.8	151 9	146 8	152 5
<u>~</u>	2021	154 4	149 6	143 0	137 9	144.9	194 0	212.0	203 5	189.3	153.9	148.8	154.5
₫.	2022	156.5	151.6	145 0	139.7	146.9	196 6	214.8	206.3	191 9	156.0	150.8	156 6
	2023	158 6	153 7	146 9	141.6	148 9	1 9 9 3	217 7	209.1	194 5	158.1	152 8	158 7
	2024	160 7	155 8	148 9	143 5	150.8	201.9	220 6	211 8	197 0	160 2	154 8	160 8
	2025	162.9	157 8	150 9	145 5	152 8	204 6	223.5	214 6	199 6	162 3	156 9	162.9
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Section 2

Table 2-6: Monthly Load Factors

		la	F-L		A	N 0		last.	A	0	0-4		_
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	_Dec
	1996												
	1997												
	1998												
77	1999												
Ĕ	2000												
Historical	2001												
Ξ	2002												
	2003												
	2004	74.3%	74 5%	73 3%	66 8%	66 9%	58 0%	59.3%	59 5%	60 5%	69 2%	74.3%	72 1
	2005	74 3%	73 4%	76 3%	72 4%	72 3%	60 4%	65 1%	62 <u>5</u> %	66 0%	67 2%	72.8%	73 5
	2006	70 7%	71 7%	71 7%	70.0%	66 3%	58.6%	61 6%	62.3%	61.7%	67 5%	70.4%	71 4
	2007	70 7%	71.8%	71 7%	70.1%	66.3%	58.7%	61 6%	62 3%	61.7%	67.5%	70 3%	71 4
	2008	70.7%	69.3%	71 7%	70.1%	66 3%	58 7%	61 6%	62.3%	61.7%	67.5%	70.4%	71.5
反	2009	70.7%	71 8%	71.7%	70.1%	66 3%	58 7%	61.6%	62 2%	61 7%	67 5%	70.5%	71.6
Projected	2010	70.7%	71 8%	71.7%	70 1%	66 3%	58.7%	61.6%	62.2%	61 7%	67 5%	70.6%	71 7
픙	2011	70 8%	71 8%	71 7%	70 1%	66 3%	58.7%	61 6%	62 2%	61 7%	67 5%	70 5%	71 6
<u>r</u>	2012	70 8%	69 4%	71.7%	70 1%	66 3%	58 7%	61 6%	62.2%	61 7%	67 5%	70 6%	71 7
	2013	70.8%	71 8%	71 7%	70.1%	66.3%	58 7%	61.6%	62 2%	61.7%	67 5%	70.5%	71.6
	2014	70.8%	71.9%	71 7%	70.1%	66.3%	58 7%	61 6%	62 2%	61.7%	67 5%	70 6%	71.7
	2015	70.8%	71 9%	71.7%	70 1%	66 3%	58 7%	61 6%	62.2%	61.7%	67 5%	70.6%	71 8
Avg.	1996-2005	74 3%	73 9%	74 8%	69 6%	69.6%	59 2%	62.2%	61 0%	63 2%	68 2%	73 6%	72.8
á	2006-2015	70 8%	71 3%	71 7%	70.1%	66.3%	58.7%	61 6%	62 2%	61 7%	67 5%	70 5%	716

Table 2-7: Monthly Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
_	1996	N/A	Ñ/A	N/A	N/A	N/A	N,						
	1997	N/A	N/A	N/A	Ni								
	1998	N/A	N/A	N/A	N _i								
77	1999	N/A	N/A	N/A	N/								
Historical	2000	N/A	N/A	N/A	Ni								
stc	2001	N/A	N/A	N/A	N/A	91.9	122.0	137 8	146.2	120 7	90.0	92 4	92+
Ξ	2002	94 2	91 1	91.3	97 1	106.5	132.5	141.6	130.1	137 8	90 5	95.5	98.
	2003	106.4	108 5	104.6	102 1	100 5	133 4	136 2	149 2	136 4	105 1	99 7	106.
	2004	108.5	104 7	959	95.9	100 D	128.0	139 8	137.8	139.1	104 7	96 6	110.:
	2005	112.4	106 2	102 4	101.6	101 8	153.3	150 8	155 8	137 0	112.5	108 7	119
	2006	119.9	115 9	1109	106 7	113.1	148 9	162.9	157.7	147 9	118 1	116 3	121
	2007	122 0	118.0	1130	108 6	115.1	151 5	165.9	160 5	150.5	120.2	118.5	124.
	2008	124 3	120.2	115.1	110 7	117 3	154.4	168,9	163 5	153.3	122 4	120.5	126.
eq	2009	126 4	122.2	1170	112.6	119 3	156.9	171 7	166.2	155 9	124 5	122.3	128.0
Projected	2010	128.3	124 1	1188	114 3	121.1	159 2	174.3	168 7	158 2	126.4	124 1	129 !
ŏ	2011	130 2	125 9	120 6	116 0	122.9	161 5	176.8	171 2	160.5	128.2	126 0	131 !
ŭ.	2012	132 2	127.8	122.5	117.8	124 8	164 0	179 5	173.9	163 0	130 2	127.9	133 {
	2013	134.2	129.7	124 3	119.6	126 7	166.4	182 3	176 5	165.4	132.2	130.0	135.
	2014	136.3	131 8	1263	121 5	128 7	169 0	185 1	179 3	168 0	134 3	131 9	138 (
	2015	138 4	133.7	128 2	123 3	130.6	171 5	187 8	181 9	170.5	136.2	133.8	139.9
	2016	140 3	135 7	130.0	125.1	132 5	173 9	190 5	184 5	172.9	138 2	135.7	141.9
	2017	142.3	137.6	131 9	126.9	134 4	176 4	193 2	187.1	175.4	140 2	137.6	143.9
	2018	144 3	139 5	1338	128 7	136 3	178.8	195 9	189 7	. 1778	142 2	139 4	145 {
eq	2019	146.3	141 4	135 6	130 4	138.2	181 2	198.5	192 2	180 1	144.1	141 3	147 {
Projected	2020	148.2	143.3	137.4	132.2	140.0	183 6	201 2	194 8	182 5	146 0	143 2	149 7
Ö	2021	150 2	145 3	1393	133 9	141 9	186 1	203 9	197.4	185.0	148 0	145 1	151 7
2	2022	152 3	147.2	141.2	135.8	143.8	188.6	206.6	200.1	187 4	150.0	147 1	153.8
	2023	154.4	149 3	1432	137 7	145.8	191 2	209.4	202 8	190.0	152 1	149.1	155.9
	2024	156 4	151.3	145.1	139.5	147 8	193.7	212 2	205.5	192.5	154 1	151.1	157 (
	2025	158 5	153 3	147 1	141 4	149 7	196.3	215 0	208 2	195 0	156 2	153 1	160 (

Table 2-8: Monthly Coincidence Factors

	Year	Jan	Feb	Mar	Apr _	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1996												
	1997												
	1998												
77	1999												
Historical	2000												
stc	2001												
王	2002							•					
	2003	94 9%	96 0%	96.3%	95.5%	95 1%	94.8%	90 7%	90.6%	96.0%	90.2%	91 1%	93 3
	2004	94 9%	94 3%	90 7%	88.9%	92 1%	90 0%	88 4%	94.4%	91 9%	89 5%	88 1%	93.2
	2005	96 7%	95 5%	96 2%	96 8%	96 7%	96 9%	94 2%	95 3%	95 0%	93 6%	95.6%	97.1
	2006	97.2%	97.0%	97.2%	97 1%	97.8%	95 8%	96 1%	96 9%	97 7%	96 0%	97.5%	98.1
	2007	97 2%	97 0%	97 2%	97 1%	97 8%	95 8%	96.1%	96 9%	97 7%	96.0%	97 5%	98 1
	2008	97 2%	97.0%	97 2%	97.1%	97.8%	95 9%	96 1%	96.9%	97.7%	96.0%	97 5%	98 1
70	2009	97.2%	97 0%	97 2%	97.1%	97 8%	95 8%	96 1%	96.9%	97 7%	96 0%	97 5%	98.1
ថ្មី	2010	97 2%	97 0%	97.2%	97 1%	97.8%	95 8%	96 1%	96 9%	97.7%	96 1%	97 5%	98 1
Projected	2011	97.2%	97 0%	97 3%	97.1%	97 8%	95 8%	96 1%	96 9%	97 7%	96 1%	97.5%	98 1
4	2012	97 2%	97.0%	97.3%	97.1%	97 8%	95 8%	96.1%	96.9%	97.7%	96.1%	97 5%	98 2
	2013	97.2%	97 0%	97 3%	97.1%	97 8%	95 8%	96.1%	96.9%	97 7%	96.1%	97.5%	98.2
	2014	97 2%	97 0%	97.3%	97.1%	97 8%	95.8%	96 1%	96 9%	97 7%	96.1%	97 5%	98.2
	2015	97 2%	97 0%	97.3%	97 1%	97 9%	95 9%	96 1%	97.0%	97.7%	96 1%	97 5%	98.2
	1996-2005	95.5%	95 2%	94 4%	93 7%	94.6%	93.9%	91.1%	93 4%	94 3%	91 1%	91.6%	94 5
	2006-2015	97 2%	97.0%	97.2%	97 1%	97.0%	95.8%	96 1%	96 9%	97 7%	96.1%	97.5%	98.1

Note: Errors in the historical CP demand data can result in Participant CP demand greater than NCP demand. In those cases, coincidence factors have be

Section 3 CURRENT RESOURCES AND FUTURE NEEDS

The following discussion provides a description of the Big Stone II Member power supply resources and a comparison to the projected coincident peak demand for the members.

GENERATION RESOURCES

Existing Generating Resources

Existing CMMPA generating resources fall into two categories, those owned by the individual Members and those for which CMMPA is the contracting agency. CMMPA is a project agency and, as such, CMMPA members determine individually which projects to pursue. The City of Willmar also owns its own generating resources. Capacity for project resources owned by CMMPA members that are not part of the Big Stone II Members have been excluded from the information presented herein.

Based on summer ratings, the existing generating capacity owned by the Big Stone II Members totals 153 MW in 2006. The majority of the generating resources are diesel/internal combustion units, with a combined 117 MW of capacity. The Big Stone II Members also own small amounts of combustion turbine, steam turbine, and hydro resources, with combined capacities of 16 MW, 19 MW, and 1 MW, respectively. Additionally, the Big Stone II Members have contracted for a 12.5 MW ownership interest in the Nebraska City 2 resource scheduled to come on line in the spring of 2009.

Purchase Power Resources

The Big Stone II Members rely on various purchase power contracts, as follows.

System Firm Purchases

The Big Stone II Members contract for a combined 30 MW of system-firm capacity and energy, including several hydro purchases from the Western Area Power Administration and two Full Requirements purchases from Northern States Power Company ("NSP").

Firm Purchases

Blue Earth purchases 5 MW from Alliant and Granite Falls purchases approximately 0.6 MW from NSP.



Non-Firm Purchases

Several Big Stone II Members purchase non-firm energy from NSP under various NSP-55 contracts and Sleepy Eye purchases energy and capacity from NSP under an A-15 contract, for which it is required to maintain backup capacity.

Wind Resources

In May 2006, Blue Earth began a 20 year purchase of approximately 2.5 MW of installed capacity from the Blue Breeze Wind Facility. CMMPA also currently purchases 6 MW from the Cedar Falls facility and 6.25 MW from the Wolf Wind Farm. In addition, CMMPA is scheduled to purchase 10 MW from the Jeffries Wind Energy Center beginning in 2007. Because CMMPA has purchased wind energy and capacity for the benefit of all of its members, the values presented in the following tables have been prorated to reflect the load ratio share of the Big Stone II Members only.

Of the approximately 17.5 MW of wind capacity that is under contract by the Big Stone II Members, approximately 3 MW is assumed to be available to help meet the summer peak demand of the Big Stone II Participants. The level of firm capacity assumed for wind resources is based on wind resource generation patterns estimated for these facilities and applying the capacity accreditation procedures proposed by MAPP for wind resources. Wind generating patterns assumed for this analysis were developed and provided by Global Energy Concepts, LLC, an internationally recognized wind energy engineering firm located in Seattle, Washington.

Capacity Ratings

For the purposes of this analysis, all capacity owned or contracted by the Big Stone II Members, regardless of current accreditation status, was assumed to be available to meet the planning requirements of the members. Capacity ratings were derived from available EIA 411 reports, URGE testing reports, and information provided by the Big Stone II Members. Table 3-1 contains a listing of capacity ratings for all Big Stone II Member generating resources, while Table 3-2 contains a listing of purchase power resource for the Big Stone II Members.

Table 3-1: CMMPA Generating Resources

Line		Generating	Unit	Primary	Generator Nameplate	Net Capac	itv - KW	Commercial In Service
No.	Owner	Station / Unit	Туре	Fuel Type	Rating (KW)	Summer	Winter	Date
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Blue Earth	Unit No 1	IC					
2				Diesel	1,500	1,500	1,500	1960
	Blue Earth	Unit No 3	IC	Diesel	1,600	1,600	1,600	1993
3	Blue Earth	Unit No 4	IC	Diesel	1,600	1,600	1,600	1993
4	Blue Earth	Unit No 5	IC	Diesel	1,600	1,600	1,600	1993
5	Blue Earth	Unit No 6	IC	Diesel	1,825	1,825	1,825	1996
6	Delano	Unit No 1	IC	Diesel	840	830	830	1951
7	Delano	Unit No 2	IC	Diesel	3,125	2,880	2,880	1972
8	Delano	Unit No 3	IC	Diesel	1,136	1,170	1,170	1973
9	Delano	Unit No 4	iC	Diesel	1,140	1,170	1,170	1946
10	Delano	Unit No 5	ic	Diesel	1,365	1,350	1,350	1989
11	Delano	Unit No 6	iC	Diesel	1,250	1,050	1,050	1994
12	Delano	Unit No 7	ic	Diesel	3,000	3,750	3,750	1999
13	Delano	Unit No 9	CT	No 2 Oil	12,500	13,300	13,300	2002
			IC					
14	Fairfax	Unit No 2a		Diesel	1,800	1,800	1,800	2001
15	Glencoe	Unit No 5	IC	Diesel	1,000	1,000	1,000	1957
16	Glencoe	Unit No 6	IC	Diesel	1,000	1,000	1,000	1961
17	Glencoe	Unit No 7	IC	Diesel	3,500	3,500	3,500	1966
18	Glencoe	Unit No 8	IC	Diesel	5,500	5,600	5,600	1969
19	Glencoe	Unit No 9	IC	Diesel	6,400	6,400	6,400	1973
20	Glencoe	Unit No. 10	IC	Diesel	7,000	7,000	7,000	1985
21	Glencoe	Unit No. 11	IC	Diesel	4,860	4,800	4,800	1998
22	Glencoe	Unit No 12	IC	Diesel	4,860	4,800	4,800	1998
23	Granite Falls	Unit No. 1	IC	Diesel	2,000	2,000	2,000	2003
24	Granite Falls	Unit No 2	IC	Diesel	2,010	2,010	2,010	2003
25	Granite Falls	Unit No 3	IC	Diesel	2,010	2,010	2,010	2003
26	Granite Falls	Unit No 1 (Hydro)	HY	Hydro	1,200	956	154	1986
27	Janesville	Unit No 1	IC	Diesel	1,365	1,365	1,365	1965
28	Janesville	Unit No 2	iC	Diesel				
29	Janesville	Unit No 3	IC		1,136	1,135	1,135	1972
30	Janesville	Unit No 4	iC	Diesel Diesel	670	670	670	1955
	Onles vine	Other NO. 4			1,825	1,825 .	1,825	1998
31	Kenyon	Unit No. 2	IC	Diesel	1,823	1,823	1,823	1997
32	Kenyon	Unit No 3	IC	Diesel	1,806	1,806	1,806	1997
33	Kenyon	Unit No. 4	IC	Diesel	1,822	1,822	1,822	1997
34	Mountain Lake	Unit No. 1	IC	Diocal	1 020	1.075		4000
35	Mountain Lake	Unit No 2	ic	Diesel Diesel	1,830	1,875	1,875	1998
36	Mountain Lake	Unit No 3	ic	Diesel	1,130	1,125	1,125	1954
37	Mountain Lake	Unit No 4	IC	Diesel	1,800	1,900	1,900	1998
38	Mountain Lake	Unit No 5	ic		1,900	1,900	1,900	1968
				Diesel	1,360	1,380	1,380	1950
39	Sleepy Eye	Unit No 1	IC	Diesel	1,825	1,880	1,880	1999
40	Sleepy Eye	Unit No 2	IC	Diesel	1,825	1,830	1,830	2001
41	Sleepy Eye	Unit No 3	IC	Diesel	1,500	1,840	1,840	1961
42	Sleepy Eye	Unit No 4	IC	Diesel	1,825	1,830	1,830	1995
43	Sleepy Eye	Unit No 5	IC	Diesel	1,825	1,200	1,200	1996
44	Springfield	Unit No 1	IC	Diesel	1,825	1,825	1,825	1994
45	Springfield	Unit No 2	IC	Diesel	1,825	1,825	1,825	1996
46	Springfield	Unit No 3	IC	Diesel	1,825	1,825	1,825	1998
47	Springfield	Unit No. 4	IC	Diesel	1,825	1,825	1,825	1998
48	Springfield	Unit No 5	IC	Diesel	1,825	1,825	1,825	2001
49	Windom	Unit No 4	CT	No 2 Oil	2,500	2.800	2,800	1980
50	Windom	Unit No C1	IC	Diesel	1,830	2,000	2,000	2001
	Windom	Unit No. C2	IC	Diesel	1,830	2,000	2,000	2001
52	Windom	Unit No C3	IC	Diesel	1,830	2,000	2,000	2001
53	Willmar	Unit No ST2	ST	NG	6,500	6,500	0	1956
54	Willmar	Unit No ST3	ST	Coal	12,500	12,500	11,500	1970
55	Willmar	Unit No E04	IC	Diesel	2,000	2,000	2,000	2000
56	Willmar	Unit No E05	iC	Diesel	2,000	2,000	2,000	2000
57	Willmar	Unit No E06	iC	Diesel	2,000	2,000	2,000	2000
58	Willmar	Unit No SW1	iC	Diesel	2,000	2,000	2,000	2000
59	Willmar	Unit No SW2	iC	Diesel	2,000	2,000	2,000	2000
60	Willmar	Unit No SW3	iC	Diesel	2,000	2,000	2,000	2000
61	СММРА	Nebraska City 2	ST	Coal				
62	CMMPA	Big Stone II	ST	Coal	12,500 30,000	12,500	12,500	5/2009 5/2011
02	CIVINITA	olg Glorid II	31	COAI	30,000	30,000	30,000	7 [[] []
63	TOTAL GENERA	ATING RESOURCES (MW)		•	195,132	186,830	
					•			

Table 3-2: CMMPA Purchase Power Resources

				Generator			Commercial
Line		Resource	Primary	Nameplate	Net Capaci		In Service
No.	Purchases/Resources	Туре	Fuel Type	Rating (KW)	Summer	Winter	Date
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	System Firm Purchases						
	WAPA Purchase [1]						
1	Fairfax	Purchase	Hydro		1,775	1,685	
2	Granite Falls	Purchase	Hydro		1,260	1,767	
3	Mountain Lake	Purchase	Hydro	•	942	1,160	
4	Sleepy Eye	Purchase	Hydro		2,400	819	
5	Springfield	Purchase	Hydro		947	1,261	
6	Windom	Purchase	Hydro		7,757	5,624	
7	Willmar	Purchase	Hydro		6,371	5,761	
	NSP Full Requirements						
8	Fairfax				[2]	[2]	
9	Kasson				[3]	[3]	
	Firm Purchases						
10	Blue Earth - Alliant - Purchase	Purchase			5,000	. 5,000	
11	Granite Falls - NSP Firm Purchase	Purchase			608	608	
	Non-Firm Purchases						
12	NSP 55 Energy Purchase						
13	Delano	Purchase			[4]	[4]	
14	Glencoe	Purchase			[4]	[4]	
15	Janesville	Purchase			[4]	[4]	
16	Kenyon	Purchase			[4]	[4]	
17	Mountain Lake	Purchase			[4]	[4]	
18	Windom	Purchase			[4]	[4]	
19	Sleepy Eye NSP A-15 Non-Firm Purchase	Purchase			[5]	[5]	
	Wind Resources						
20	Blue Earth						
21	Blue Breeze 1	Purchase	Wind	1,250	234	399	5/2006
22	Blue Breeze 2	Purchase	Wind	1,250	234	399	5/2006
	CMMPA			1,200			0/11000
23	Cedar Falls	Purchase	Wind	4,056	842	1,344	3/2005
24	Wolf Wind Farm	Purchase	Wind	4,225	662	1,840	4/2006
25	Jeffers Wind Energy Center	Purchase	Wind	6,760	1,008	2,299	1/2007
	Talle Energy Control		*******	5,700	. 1000	2,200	112001

^[1] Summer/Winter ratings for WAPA reflect current July/January contract values

Expected Generation Resource Retirements

At present, only one of the Big Stone II Members has a generating resource scheduled for retirement. Sleepy Eye is currently planning to retire its diesel Unit No. 3 effective January 1, 2007. All of the purchase power contracts, except for the hydro purchases from WAPA are scheduled for retirement over the Planning Period.

MEMBER DSM ACTIVITIES

CMMPA is a project oriented, wholesale provider of power to its members, and as such, CMMPA does not have any direct control over its members regarding the development and implementation of demand-side management programs. In accordance with Minnesota law, the members of CMMPA file reports with the DOC

^[2] Capacity under Fairfax NSP full requirements service is equal to projected peak demand less WAPA purchases.

^[3] Capacity under Kasson NSP full requirements service is equal to projected peak demand

^[4] NSP-55 purchases provide non-firm energy with minimum must take provisions at 55% of Member load net of WAPA purchases

^[5] Sleepy Eye A-15 purchase provides non-firm energy at 100% block purchase of 3 MW summer and 2 MW winter

regarding annual efforts made by the utility to implement conservation programs. CMMPA regularly encourages it members to engage in conservation programs and it is currently assisting its members with the development of an integrated SCADA and load management system. Table 3-3, summarizes the DSM programs currently being undertaken by the Big Stone II Members

It is important to note that to the extent that historical levels of DSM (i.e., demand and energy reduction) have occurred and are reflected in the historical demand and energy data reported by the members, then the 2006 Load Forecast captures these effects in the econometric forecast equations presented herein. As such, the forecast load growth contained in this Analysis reflects continued growth in DSM demand and energy reductions in proportion to the projected load growth of the Big Stone II Members.

Table 3-3: CMMPA Existing DSM Programs

				DSM P	rogram				
Bìg Stone II Member	Efficient Lighting Rebates & Promotions	Efficient Appliance Rebates & Promotions	Weatherization Rebates & Promotions	Energy Audits & Customer Education	HVAC Maintenance Service & Equipment Rebates	Low-Income Assistance	Load Management	Tree Program	
Blue Earth	R,C	R		R	R,C		R		l
Delano	С	R		R			R		l
Fairfax	С					R			ļ
Glencoe	С	R			R				l
Granite Falls	С	R							l
Janesville		R	\	R			1	,	l
Kasson		R		R		R	R		
Kenyon	R,C	R	R	R,C	R.	R	R		
Mountain Lake	R,C	R	R		R		R		ĺ
Sleepy Eye	Į	R	ļ						ĺ
Springfield	R			1		R	R	R	l
Willmar	C	R			R,C		R,C		
Windom	R	R	[R			R		l

R - Residential Program, C - Commerical / Municipal Program

NEEDS FOR ADDITIONAL CAPACITY AND ENERGY

According to the coincident peak load forecast presented in the preceding section, the Big Stone II Member resources are adequate to meet its peak demand and a 15% planning reserve requirement until the summer of 2008. Capacity deficiencies in 2008 are projected to be small (less than 2 MW), and capacity needs are projected to increase only slightly in 2009 as certain purchase power contracts are set to expire and as the Nebraska City 2 project is scheduled to come on line. However, by 2011,

without the addition of Big Stone Unit II, the reserve margin for the Big Stone II Members is projected to fall below 10 percent. Capacity needs are projected to grow by an average of 3.5 megawatts per year thereafter. By 2025, if no capacity other than currently planned amounts is added, the Big Stone II Members would need approximately 58 megawatts of capacity additions.

The following figures and tables illustrate the projected capacity needs for the Big Stone II Members. Tables 3-4 and 3-5 present the projected loads and capacity resources for the Big Stone II Members for the summer and winter seasons, respectively, over the period 2006 through 2025.

Figures 3-1 demonstrates the projected annual capacity shortfall for the Big Stone II Members during the summer season excluding capacity from Big Stone Unit II. Figure 3-2 shows the annual capacity shortfalls during the summer season including capacity from Big Stone Unit II.

Figures 3-3 and 3-4 provide graphical representations of the projected loads and capacity resources for the Big Stone II Members for the summer and winter seasons, respectively, over the period 2006 through 2025. These figures include the capacity from Big Stone Unit II.

Figure 3-5 shows the projected annual energy requirements for the Big Stone II Members for 2006 through 2025.

Table 3-4: Big Stone II Members Load and Capacity Summary, Summer

Line	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 2
1	Planning Requirements - MW Summer Peak Demand [1]	163	166	169	172	174	177	180	182	185	188	191	193	196	199	201	204
2 3	WAPA Purchases Full Requirements Purchases	(21) (8)	(21) (9)	(21) (9)	(21)	(21)	(21)	(21)	(21) 	(21) 	(21)	(21)	(21) 	(21) 	(21) 	(21)	(21)
4 5	Total Peak Requirements Reserve Requirement [2]	133 20	136 20	139 	150 23	153 23	155 23	158 24	161 24	164 25	166 25	169 25	172 26	174 26	177 27	180 27	182 27
6	Total Capacity Requirements	153	156	160	173	176	179	182	185	188	191	194	198	201	204	207	210
	Existing Portfolio - MW																
7	Nebraska City 2 Coal Unit [3]	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12	12
8	Big Stone II Coal Unit	-	-	-	-	-	30	30	30	30	30	30	30	30	30	30	30
9	Internal Combustion Units	117	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
10	Combustion Turbine Units	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
11	Steam (Coal/NG)	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
12	Hydro Units	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Wind Units	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
14	Firm Purchases	6	6	5	5	5	5	5	5	5	5	5	5	5		<u> </u>	
15	Total Resources	160	159	158	170	170	200	200	200	200	200	200	200	200	<u>195</u>	195	194
16	Capacity Deficiency (MW)			(2)	(3)	(6)								<u>(1</u>)	<u>(9)</u>	(12)	(15)

^[1] Sum of Big Stone II Member coincident peaks measured at the Member delivery point

 ^[2] Planning reserve margin assumed to be 15%
 [3] Capacity ratings adjusted down for an assumed 3% losses

Table 3-5: Big Stone II Members Load and Capacity Summary, Winter

Line	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Planning Requirements - MW																
1	Winter Peak Demand [1]	120	122	124	126	128	130	132	134	136	138	140	142	144	146	148	150
2 3	WAPA Purchases	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)
ა	Full Requirements Purchases	(9)	(9)	(9)											 .		
4	Total Peak Requirements	95	97	99	110	112	114	116	118	120	122	124	126	128	130	132	134
5	Reserve Requirement [2]	14	15	15	17	17		17	18	18	18	<u>19</u>	19	19	19	20	
6	Capacity Requirements	109	111	114	127	129	131	133	136	138	140	143	145	147	149	152	154
	Existing Portfolio · MW																•
7	Nebraska City 2 Coal Unit [3]	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12
8	Big Stone II Coal Unit	-	-	-	-	-	-	30	30	30	30	30	30	30	30	30	30
9	Internal Combustion Units	117	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
10	Combustion Turbine Units	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
11	Steam (Coal/NG)	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	Hydro Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Wind Units	1	5	5	5	5	5	5	5	5	- 5	5	5	5	5	5	5
14	Firm Purchases	7	7	7	7	7	7	7	7	7	7	7	7	7	2	2	2
15	Total Resources	<u>153</u>	<u>155</u>	<u>155</u>	154	166	166	<u>196</u>	196	<u>196</u>	196	196	196	196	191	191	191
16	Capacity Deficiency (MW)	<u> </u>					-			<u>-</u>					 .		

Sum of Big Stone II Member coincident peaks measured at the Member delivery point
 Planning reserve margin assumed to be 15%
 Capacity ratings adjusted down for an assumed 3% losses

Figure 3-1: Big Stone II Members Capacity Deficit Without Big Stone Unit II

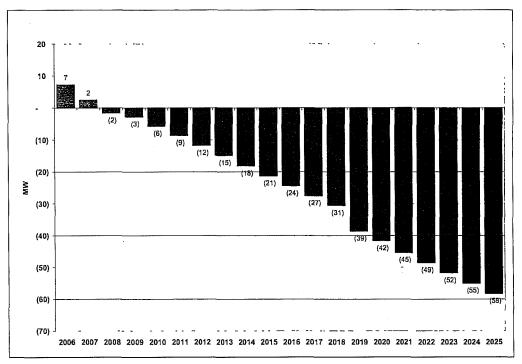
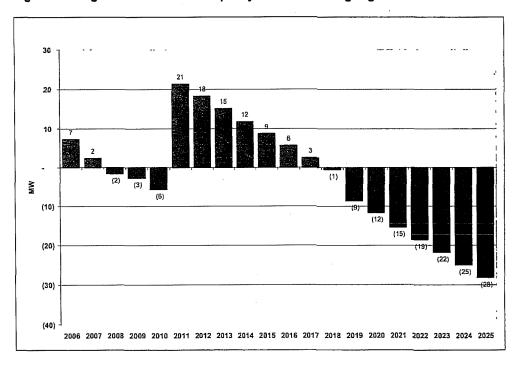
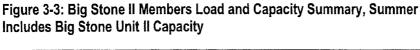


Figure 3-2: Big Stone II Members Capacity Deficit Including Big Stone Unit II





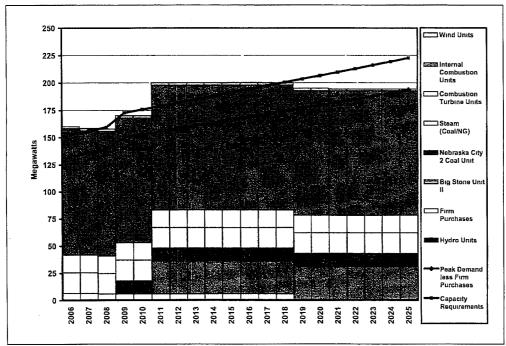
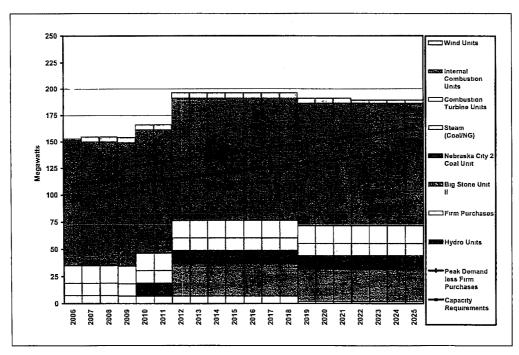


Figure 3-4: Big Stone II Members Load and Capacity Summary, Winter



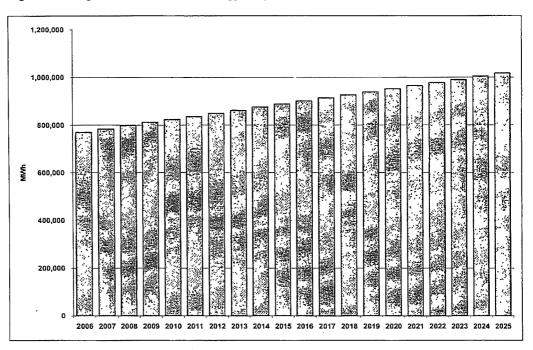


Figure 3-5: Big Stone II Members Energy Requirements Chart

Section 4 RESOURCE EXPANSION ANALYSIS

MODELING METHOD

R. W. Beck performed a Resource Expansion Analysis for the Big Stone II Members to determine the most cost-effective resource expansion plan alternatives that could satisfy the future energy and capacity needs of the Big Stone II Members. The analysis was performed using the Strategist® software package, licensed by New Energy Associates, a Siemens company. Strategist employs a dynamic programming optimization technique combined with a convolution generation dispatch process to approximate the operation of generating resources and power purchases and sales for electric utilities. Through the dynamic optimization process, Strategist explores all potential generation expansion plans that can be produced from a given set of resource alternatives and identifies the best candidate plans based on the planning objectives identified by the user.

Figure 4-1, below, depicts an overview of the Resource Expansion Analysis process. The initial step in the Analysis involved the development of various forecasts and assumptions, including the demand and energy forecast discussed in Section 2, fuel prices, capital and operating characteristics for generic resources, and economic assumptions. Operating characteristics for the Big Stone II Member resources, including generating units and power purchase contracts, to be modeled in Strategist were developed from information provided by the members. Future potential power supply alternatives were developed to provide a broad range of generating resource alternatives, including coal and natural gas fired generating technologies and wind technologies.

The alternatives were analyzed in Strategist along with the existing resources of the Big Stone II Members to determine the most cost-effective plan(s) the Big Stone II Members could pursue over the 25-year Planning Period (2011 through 2035). For the Analysis, two primary objectives were modeled in Strategist. First, the Big Stone II Members must meet a minimum 15 percent reserve margin beginning in 2011, and, second, the optimum potential resource plans must provide the lowest projected utility costs of all possible alternatives over the Planning Period. Potential resource plans were ranked from lowest to highest cost based on a computation of total, present value costs, including generation production costs, operating and maintenance costs, and capital costs for the CMMPA Members over the 25-year Planning Period. The Analysis also includes a quantification of capital and escalating costs beyond the study period, commonly referred to as end effects.

Unless currently scheduled for retirement, the existing Big Stone II Member resources were assumed to remain available over the Planning Period. Generic resources, as described in more detail in this section, and the Big Stone II Member portion of the

Big Stone Unit II were modeled and made available for selection by Strategist when meeting future capacity and energy requirements.

Potential Supply-Side
Alternative Resources

Resource Integration
STRATEGIST/PROVIEW

Optimal Supply-Side Plan (s)

Alternative Supply Cases

Base Expansion Plan

Demand-Side Evaluation
STRATEGIST/DCE

Figure 4-1: Resource Expansion Analysis Process Overview

RESOURCE EXPANSION ALTERNATIVES

Several resource expansion alternatives were considered for the Big Stone II Members in the capacity expansion model. Table 4-1 summarizes the types of generating resource additions considered and their primary operating characteristics.

Operating characteristics for Big Stone Unit II were obtained from Otter Tail, and the capacity was based on the current allocation of the Big Stone II Members. In addition to the Big Stone Unit II, two generic, coal-fired resource technology options were modeled as expansion options in the analysis. These resource types – integrated gasification combined cycle ("IGCC") and super-critical pulverized coal ("supercritical coal") units – were made available as expansion alternatives beginning in 2011.

Table 4-1: Big Stone Unit II and Expansion Resource Alternatives **Modeled Operating Characteristics**

			Generic Resources				
		Big Stone	F-Class	F-Class	Super		
			GT	2x1 CC	Critical	IGCC	Wind
Fuel Type		PRB Coal	NG	NG	PRB Coal	PRB Coal	N/A
Baseload Capacity Rating	MW	600	170	530	800	630	150
Construction Cost (2006\$)							
Overnight Construction Cost	\$/kW	1,640	480	580	1,750	1,980	1,560
Development & Construction Period	Months	48	. 30	48	72	66	20
Other Operating Characteristics							
Average Degraded Heat Rate	Btu/kWh	9,300	10,300	7,040	9,240	9,390	-
Annual Forced Outage Rate	%	4 0%	1 0%	2.0%	4.0%	6.0%	4 0%
Annual Scheduled Outage Factor	%	9 0%	3 0%	5 0%	9 0%	9.0%	9 0%
Fixed O&M (2006\$) 1	\$/kW-yr	37 90	7 50	19 50	42 00	50 50	31.00
Variable O&M (2006\$)	\$/MWh	1 80	17 65	3 00	1 80	4.00	-
Emissions							
SO ₂ Emissions Rate	lb/MMBtu	0 0500	0 0006	0 0006	0.1000	0 0100	0 0000
NO _x Emissions Rate	lb/MMBtu	0 05	0 01	0 01	0.07	0.02	0 00
PM ₁₀ Emissions Rate	lb/MMBtu	0 030	0 005	0.005	0.030	0 010	0 000
CO ₂ Emissions Rate	lb/MMBtu	0	117	117	213	213	0
CO Emissions Rate	lb/MMBtu	0 10	0 01	0 01	0 15	0.00	0 00
Pb Emissions Rate	lb/GBtu	0 0079	0.0000	0 0000	0 0080	0.0000	0 0000
Hg Emissions Rate	lb/GBtu	0 0025	0.0000	0 0000	0.0025	0 0010	0 0000

¹ Includes property taxes, insurance, and non-plant corporate expenses

Generic intermediate and peaking resources were considered in the expansion optimization analysis in the form of natural-gas fired resources: a simple-cycle F-class gas turbine resource and a two-on-one, F-class combined cycle resource.

A generic wind turbine, an intermittent and renewable resource, was also modeled as a resource expansion option to assist the Big Stone II Members in fulfilling their renewable energy benchmark requirements under the Minnesota Renewable Energy Objective.

All of the generic resource technologies were modeled in 10 MW increments under an assumption that the Big Stone II Members could acquire capacity through a partial ownership arrangement.

EXISTING RESOURCES

Unless currently scheduled for retirement, the existing Big Stone II Member resources were assumed to remain available over the Planning Period. Tables 4-2 and 4-3 below provide the basic operating characteristics as modeled for the generating resources and purchase power resources, respectively, for the Big Stone II Members.

Table 4-2: Big Stone II Member Existing Generating Resources
Modeled Operating Characteristics

				Primary	Generator			Commercial	•		teristics
Line		Generating	Unit	Fuel	Nameplate	Net Capac		In Service	Date for	Var O&M	Full Loa
No.	Owner	Station / Unit	Type	Type	Rating (KW)	Summer	Winter	Date	Retirement	(\$/MWh)	Heat Rat
1	(a) Blue Earth	(b) Unit No. 1	(c) IC	(d) Diesel	(e) 1,500	(f)	(g)	(h)	(1)	(j)	(k)
2	Blue Earth	Unit No 3	IC	Diesel	1,600	1,500 1,600	1,500 1,600	1960 1993		13 92 13 92	9,183
3	Blue Earth	Unit No 4	IC	Diesel	1,600	1,600	1,600	1993			9,500
4	Blue Earth	Unit No 5	IC	Diesel	1,600	1,600	1,600	1993		13 92 13 92	9,500 9,500
5	Blue Earth	Unit No 6	IC	Diesel	1,825	1,825	1,825	1996		13 92	9,460
6	Delano	Unit No 1	IC	Diesel	840	830	830	1951		8 85	11,324
7	Delano	Unit No 2	iC	Diesel	3,125	2,880	2,880	1972		8 85	11,048
8	Delano	Unit No. 3	IC	Diesel	1,136	1,170	1,170	1973		8 85	11,071
9	Delano	Unit No. 4	IC	Diesel	1,140	1,170	1,170	1946		8 85	11,431
10	Delano	Unit No. 5	IC	Diesel	1,365	1,350	1,350	1989		8 85	11,362
11	Delano	Unit No 6	IC	Diesel	1,250	1,050	1,050	1994		8 85	11,193
12	Delano	Unit No. 7	IC	Diesel	3.000	3,750	3,750	1999		8 85	10,871
13	Delano	Unit No 9	CT	No 2 Oil	12,500	13,300	13,300	2002		13 30	16,802
14	Fairfax	Unit No 2a	iC	Diesel	1 800	1,800	1,800	2001		9 00	9,512
15	Glencoe	Unit No. 5.	IC	Diesel	1 000	1,000	1,000	1957		8 98	9,422
16	Glencoe	Unit No 6	IÇ	Diesel	1.000	1,000	1,000	1961		8 98	9,422
17	Glencoe	Unit No 7	IC	Diesel	3,500	3,500	3,500	1966		8 98	9,320
18	Glencoe	Unit No 8	IC	Diesel	5,500	5,600	5,600	1969		8 98	9,778
19	Glencoe	Unit No 9	IC	Diesel	6,400	6,400	6,400	1973		8 98	9,249
20	Glencoe	Unit No 10	IC	Diesel	7.000	7,000	7,000	1985		8 98	10,046
21	Glencoe	Unit No 11	IC.	Diesel	4,860	4,800	4,800	1998		8 98	9,500
22	Glencoe	Unit No 12	IC	Diesel	4 860	4,800	4,800	1998		8 98	9,306
23 24	Granite Falls	Unit No. 1	IC IC	Diesel	2,000	2,000	2,000	2003		9 00	9,512
24 25	Granite Falls Granite Falls	Unit No 2 Unit No 3	IC	Diesel Diesel	2 010 2,010	2,010 2,010	2,010	2003 2003		9 00 9 00	9,512
26	Granite Falls	Unit No 1 (Hydro)	HY	Hydro	1 200	956	2,010 154	1986		9 00	9,512
27	Janesville	Unit No 1	IC	Diesel	1,365	1,365	1,365	1965		18 82	9,500
28	Janesville	Unit No 2	ic	Diesel	1.136	1,135	1,135	1972		18 82	9,500
29	Janesville	Unit No 3	ic	Diesel	670	670	670	1955		18 82	9,500
30	Janesville	Unit No 4	IC	Diesel	1.825	1,825	1,825	1998		18 82	8,702
31	Kenyan	Unit No 2	IC	Diesel	1,823	1,823	1,823	1997		15 00	9,460
32	Kenyon	Unit No 3	1C	Diesel	1.806	1.806	1,806	1997		15 00	9,460
33	Kenyon	Unit No 4	1C	Diesel	1,822	1.822	1,822	1997		15 00	9,460
34	Mountain Lake	Unit No 1	łC	Diesel	1,830	1,875	1.875	1998		14 60	10,37
35	Mountain Lake	Unit No 2	IC	Diesel	1,130	1,125	1,125	1954		14 60	11,029
36	Mountain Lake	Unit No. 3	IC	Diesel	1 800	1,908	1,900	1998		14 60	10,15
37	Mountain Lake	Unit No 4	IC	Diesel	1.900	1,900	1,900	1968		14 60	9,500
38	Mountain Lake	Unit No 5	IC	Diesel	1 360	1,380	1.380	1950		14 60	9,500
39	Sleepy Eye	Unit No 1	IC	Diesel	1 825	1.880	1,880	1999		33 75	9,326
40	Sleepy Eye	Unit No 2	IC	Diesel	1 825	1,830	1,830	2001		33 75	9,326
41	Sleepy Eye	Unit No 3	IC	Diesel	1 500	1,840	1,840	1961	1/2007	33 75	9,328
42	Sleepy Eye	Unit No 4	IC	Diesel	1,825	1,830	1,830	1995		33 75	9,326
43	Sleepy Eye	Unit No 5	IC	Diesei	1,825	1,200	1,200	1996		33 75	9,500
44	Springfield	Unit No. 1	IC	Diesel	1,825	1,825	1,825	1994		17 81	9,459
45 40	Springfield	Unit No 2	IC IC	Diesel	1.825	1,825	1,825	1996		17 81	9,459
46 47	Springfield Springfield	Unit No 3	IC	Diesel	1.825	1,825	1,825	1998		17 81	9,459
47 48	Springfield Springfield	Unit No. 4 Unit No. 5	IC	Diesel Diesel	1 825 1 825	1,825 1,825	1,825 1,825	1998 2001		17 81 17 81	9,459 9,459
49	Windom	Unit No 4	СТ	No 2 Oil	2,500	2,800	2,800	1980		13 30	12,88
50	Windom	Unit No C1	iC	Diesel	1,830	2,000	2,000	2001		18 08	9,328
51	Windom	Unit No C2	IC	Diesel	1 830	2,000	2,000	2001		: 18 08	9,328
52	Windom	Unit No C3	iC	Diesel	1 830	2,000	2,000	2001		18 08	9,328
53	Willmar	Unit No ST2	ST	NG	6 500	6,500	0	1956		0.00	19,70
54	Willmar	Unit No ST3	ST	Coal	12,500	12,500	11,500	1970		0 00	18,20
55	Willmar	Unit No E04	IC	Diesel	2,000	2,000	2,000	2000		15 00	9,500
56 -	Willmar	Unit No E05	IC	Diesel	2,000	2,000	2,000	2000		15 00	9,500
57	Willmar	Unit No E06	IC	Diesel	2,000	2,000	2,000	2000		15 00	9,500
58	Willmar	Unit No SW1	IC	Diesel	2,000	2,000	2,000	2000		15 00	9,500
59	Willmar	Unit No SW2	IC	Diesel	2,000	2,000	2,000	2000		15 00	9,500
60	Willmar	Unit No SW3	IC	Diesel	2,000	2.000	2,000	2000		15 00	9,500
61	CMMPA	Nebraska City 2	ST	Coal	12,500	12,500	12,500	5/2009		2 70	9,330
62	CMMPA	Big Stone II	ST	Coal	30,000	30,000	30,000	5/2011		1 80	9,300

Table 4-3: Big Stone II Member Purchase Power Resources Modeled Operating Characteristics

			Primary	Generator			Commercial	Expected		Operating tensics
Line		Resource	Fuel	Nameplate	Net Capac	atu - KW	In Service	Date for	Var O&M	Full Load
No	Purchases/Resources	Type	Туре	Rating (KW)	Summer	Winter	Date	Retirement	(\$/MWh)	Heat Rate
	(a)	(b)	(c)	(d)	(e)	(1)	(g)	(h)	(1)	(j)
	System Firm Purchases							• • •	.,	•
	WAPA Purchase [1]									
1	Fairfax	Purchase	Hydro		1,775	1,685				
2	Granite Falls	Purchase	Hydro		1,260	1 767				
3	Mountain Lake	Purchase	Hydro		942	1,160				
4	Sleepy Eye	Purchase	Hydro		2,400	819				
5	Springfield	Purchase	Hydro		947	1,261				
6	Windom	Purchase	Hydro		7 757	5,624				
7	Willmar	Purchase	Hydro		6,371	5,761				
	NSP Full Requirements									
В	Fairfax				[2]	[2]		12/2008		
9	Kasson				[3]	[3]		12/2008		
	Firm Purchases									
10	Blue Earth - Alliant - Purchase	Purchase			5,000	5,000		12/2018		
11	Granite Falls - NSP Firm Purchase	Purchase			808	608		4/2008		
12	Non-Firm Purchases									
13	NSP 55 Energy Purchase									
14	Delano	Purchase			[4]	[43		5/2011		
15	Glencoe	Purchase			[4]	[4] [4]		5/2011		
16	Janesville	Purchase			[4]	[4]		5/2011		
17	Kenyon	Purchase			[4]			5/2011		
18	Mountain Lake	Purchase			(4)	[4] [4]		5/2011		
19	Windom	Purchase			[4]	[4]		5/2011		
15	Sleepy Eye NSP A-15 Non-Firm	ruicijase			[4]	[*]		3/20 1		
20	Purchase	Purchase			[5]	[5]		9/2007		
Lu		, dicitate			[0]	[9]		3/200/		
	Wind Resources									
21	Blue Earth									
22	Blue Breeze 1	Purchase	Wind	1,250	234	399	5/2006	4/2026	0 00	N/A
23	Blue Breeze 2	Purchase	Wind	1,250	234	399	5/2006	4/2026	0 00	N/A
	CMMPA			.,250	204	000	G-1000	712020	5 00	1977
24	Cedar Falls	Purchase	Wind	4.056	842	1,344	3/2005	12/2006	0.00	N/A
25	Wolf Wind Farm	Purchase	Wind	4,225	662	1,840	4/2006	3/2021	0 00	N/A
26	Jeffers Wind Energy Center	Purchase	Wind	6,760	1.008	2,299	1/2007	12/2031	0.00	N/A
		,,,,,,,		0,,00	.,002	_,200			5 00	

EMISSION COSTING

Effluents were modeled in Strategist to capture economic impacts of various emissions. The emission costs reflected in the Analysis for PM10, CO, NOx, lead, and CO2 were obtained from the externality costs published by the Minnesota Public Utilities Commission ("PUC") for Within 200 miles of Minnesota (or "MN200") and Rural. The Within 200 miles of Minnesota values were applied to the operation of Big Stone Unit II, which is located in South Dakota. All other new resources were assumed to be constructed in rural areas of Minnesota and were applied the Rural values for emissions. The environmental externality values were adjusted from the 2004 values published by the PUC to 2006 values using a 2.4% general inflation rate, and are depicted below in Table 4-4.

SO₂ emission allowance costs were estimated assuming a market price of \$600 per ton in 2006 dollars, escalated over the Planning Period at 2.4%, and were applied to the amount of SO₂ emissions produced by thermal resources modeled in each potential expansion plan. Similarly, mercury emissions were assumed to be \$70 million per ton, or \$35,000 per pound, in 2006 dollars, escalated at 2.4%.

^[1] Summer/Winter ratings for WAPA reflect current July/January contract values
[2] Capacity under Fairfax NSP full requirements service is equal to projected peak demand less WAPA purchases

Capacity under Kasson NSP full requirements service is equal to projected peak demand
 NSP-55 purchases provide non-firm energy with minimum must take provisions at 55% of Member load net of WAPA purchases [5] Sleepy Eye A-15 purchase provides non-firm energy at 100% block purchase of 3 MW summer and 2 MW wir

Table 4-4: Estimated Minnesota Environmental Externality Values [1]

	Rural	Within 200 Miles of Minnesota
PM ₁₀ \$/ton	1,053	1,053
CO \$/ton	0.5	0.5
NO _x \$/ton	125.8	125.8
Pb \$/ton	552	552
CO ₂ \$/ton	3.82	0
Mercury \$/ton	70,000,000	70,000,000
SO _x \$/ton	600	600

[1] Amounts shown are in 2006 dollars

RESOURCE PLANNING RESULTS

The Strategist model developed over 400 potential expansion plans. The three plans that ranked lowest in present value cost were identified as the optimum least-cost plans as shown in Table 4-5. The present value utility cost variance shown in the table represents the incremental cost increase for each plan from the lowest-cost plan. All three of the optimum least-cost expansion plans showed that the Big Stone II Members need to secure 30 MW of Big Stone Unit II capacity in 2011.

- Plan 1, consisting of the planned 30 megawatts of the Big Stone Unit II in 2011, plus an additional 10 megawatts of installed wind capacity in 2011, followed by 10 megawatts of supercritical pulverized coal capacity installed every two to three years beginning in 2019, was found to be the least-cost potential resource expansion plan. Based on the results of this plan, wind turbine capacity of approximately 10 MW is a viable resource option for the Big Stone II Members in 2011. This amount of wind capacity is approximately equal to the Renewable Energy Objective of the Big Stone II Members for 2012.
- Plan 2 delays the installation of the 10 MW wind unit 9 years until 2020 and moves the first 10 MW supercritical coal unit one year forward to 2018. The incremental cost increase from Plan 1 was less than \$1 million.
- Plan 3 differs from Plan 1 by replacing the final 10 MW of supercritical coal capacity in 2035 with 10 MW of IGCC capacity. The incremental cost increase from Plan 1 was \$3.4 million.

Out of the over 400 potential expansion plans, four sub-optimal plans were selected for comparison purposes to demonstrate the effect of installing different technology types. The four selected sub-optimal plans are described in more detail below.

- Plan 56 reduced the amount of Big Stone Unit 2 coal capacity to 20 MW in 2011 and also included 30 MW of wind capacity added by 2016 and 10 MW of IGCC capacity in 2033. This plan reduced the total amount of supercritical coal capacity added and would produce fewer emissions than Plan 1; however, the incremental cost increase from Plan 1 was \$34 million, due to the addition of more capitally intensive technologies.
- Plan 66 has more additions in the first year of the Planning Period (50 MW, of which 30 MW is Big Stone Unit II capacity and the remaining 20 MW is wind capacity) than the lower cost expansion plans. It also includes 30 MW of total wind capacity added over the Planning Period. The incremental cost increase from Plan 1 was \$38 million.
- Plan 73 contains an installation of a combined cycle unit, at 10 MW, and also adds 40 MW of IGCC resources in the later years of the Planning Period. The incremental cost increase from Plan 1 was \$41 million.
- Plan 98 installed three technology types in 2011, including 20 MW of Big Stone Unit II capacity, 20 MW of wind capacity, and 10 MW of combined cycle capacity. The incremental cost increase from Plan 1 was \$58 million.

Table 4-5: Expansion Plan Results

Ranking of Potential Expansion Plans

								
	Optimum Least-Cost Plans			Selective Sub-Optimal Plans				
Year of Installation	1	2	3	56	66	73	98	
2011	BS II (30MW) Wind (10MW)	BS II (30MW)	BS II (30MW) Wind (10MW)	BS II (20MW) Wind (20MW)	BS II (30MW) Wind (20MW)	BS II (30MW)	BSII (20MW) Wind (20MW CC (10MW)	
2012	-	-		-	-	_	-	
2013	_	-	_	-	-	_	_	
2014	-	-	-	-	_	-	-	
2015	_	_	-	-	_	_	_	
2016	-	-	-	Wind (10MW)	-	_		
2017	-	-	- ′	Coal (10MW)	-	_	_	
2018	_	Coal (10MW)	-	-	-	CC (10MW)	_	
2019	Coal (10MW))	_	Coal (10MW)	Coal (10MW)	Coal (10MW)	_	Coal (10MW	
2020	_	Wind (10MW)	_	_	_	Wind (10MW)	-	
2021	Coal (10MW)	Coal (10MW)	Coal (10MW)	_	Wind (10MW)	Coal (10MW)	Wind (10MW	
2022	_	-	_	Coal (10MW)	Coal (10MW)	_	Coal (10MW	
2023	Coal (10MW)	Coal (10MW)	Coal (10MW)	-	_	Coal (10MW)	_	
2024	_	_	-	 -	_	_	-	
2025	_	_	_	Coal (10MW)	Coal (10MW)	_	Coal (10MW	
2026	Coal (10MW)	Coal (10MW)	Coal (10MW)	_	_	IGCC (10MW)	_	
2027	_	_	_	_	_	_	_	
2028	_	_	_	Coal (10MW)	Coal (10MW)	_	Coal (10MW	
2029	Coal (10MW)	Coal (10MW)	Coal (10MW)	_	_	IGCC (10MW)	-	
2030	-	_	_	-	_	_	_	
2031	-	_	-	Coal (10MW)	Coal (10MW)	_	Coal (10MW	
2032	Coal (10MW)	Coal (10MW)	Coal (10MW)	-	-	IGCC (10MW)	_	
2033	-	_		IGCC (10MW)	Coal (10MW)	_	Coal (10MW	
2034	-	-	_	-	_	 -	_	
2035	Coal (10MW)	Coal (10MW)	IGCC (10MW)	-	_	IGCC (10MW)	_	
PV Utility Cost Variance (2006 \$000)	~	954	3,400	34,373	38,459	40,862	58,339	

A sensitivity analysis was performed to investigate whether additional capacity from Big Stone Unit II would be beneficial for the Big Stone II Members. This analysis indicates that at least 30 additional megawatts of capacity from Big Stone Unit II could be cost-effectively added by the Big Stone II Members in 2011. This case is not currently contemplated as a resource expansion alternative because all of the proposed

Big Stone Unit II capacity is already allocated to the Big Stone II partners. However, should additional capacity from the Big Stone Unit II become available, the resource expansion analysis found that additional quantities of the Big Stone Unit II capacity would provide for lower total present value costs for the Big Stone II Members as compared with the lowest-cost base plan described previously. While the reserve margin for the Big Stone II Members would obviously far exceed the 15 percent target under this case, the lower-cost results of this case can be understood when compared to the existing resource alternatives of the Big Stone II Members. The Big Stone II Members rely heavily on market-priced non-firm and economy purchases, and generation from owned, lower-efficiency steam resources, and oil-fired diesel generation to serve their loads. In contrast, savings in energy costs the Big Stone II Members could receive through low-cost energy available from the proposed Big Stone Unit II are projected to offset the incremental fixed and capital costs associated with the additional Big Stone Unit II capacity, resulting in lower total costs for power than what is available from their existing resources.

DSM SCREENING

CMMPA is a project oriented, wholesale provider of power to its members, and as such, CMMPA does not have any direct control over its members regarding the development and implementation of demand-side management programs. In accordance with Minnesota law, the members of CMMPA file reports with the DOC regarding annual efforts made by the utility to implement conservation programs. CMMPA regularly encourages it members to engage in conservation programs and it is currently assisting its members with the development of an integrated SCADA and load management system.

The impacts of DSM programs of the Big Stone II Members are addressed in two ways in the Analysis. First, to the extent that historical levels of DSM (i.e., demand and energy reduction) have occurred and are reflected in the historical demand and energy data reported by the members, then the 2006 Load Forecast captures these effects in the econometric forecast equations presented herein. As such, the forecast load growth contained in this Analysis reflects continued growth in DSM demand and energy reductions in proportion to the projected load growth of the Big Stone II Members.

Even though the load forecast is already likely to contain the forecast effects of DSM load reductions, and, hence, lower levels of need for new capacity, it is still necessary to investigate whether additional amounts of DSM, beyond those already implemented by the members, are warranted. To conduct this evaluation, we relied upon the information provided by the Big Stone II Members in recent Conservation Improvement Program filings. This data, supplemented by additional data provided by the members, indicates that the average program expenditures and energy savings across all DSM programs results in an estimated average costs per kilowatt hour save in the range of \$0.28.

This estimate of average program costs and savings for the Big Stone II Members was combined with other assumptions regarding DSM program costs and impacts, as

referenced in Table 4-6, below, to conduct a screening of the average costs and benefits of DSM in the Strategist model. Utilizing Strategist and incorporating the lowest-cost expansion plan described above, it is possible to investigate the existing DSM programs implemented by the Big Stone II Members and the cost-effectiveness of the programs with regard to their ability to avoid projected marginal energy costs and costs of incremental capacity additions that are consistent with the optimum resource expansion plan.

Table: 4-6: Average DSM Program Costs and Impacts for the Big Stone II Members

DSM Program Attributes	Value
Program Implementation Date	2011
Utility Program Cost	\$0.28/kWh
DSM Program Load Factor	40%
DSM Measure Life	10 yrs
DSM Measure Persistence	100%
DSM Program Free-Ridership	50%

Utilizing the assumptions presented in Table 4-6 and the avoided utility costs developed from the lowest-cost expansion case, the Strategist model computed a cost to benefit ratio under a Utility Cost Test of 0.57, indicating that the average benefits received by the Big Stone II Members from avoided costs produced from the DSM programs are projected to be 57% of the DSM program costs incurred by the members. Because the existing DSM programs being undertaken by the Big Stone II Members are not shown to be cost effective, it is reasonable to assume that should the members decide or be required to implement additional DSM programs, that additional DSM implementations would likely cost more per unit of benefit received and, therefore, additional DSM implementation would show lower cost to benefit ratios that those computed for the existing programs.

CONCLUSIONS

The resource expansion modeling demonstrates that growth in member and changes in planned capacity results in the need for new capacity additions for the Big Stone II Members in the near future. To meet this need, the Big Stone II Members will need to acquire new capacity resources. Evaluations of available and possible resource alternatives indicate that Big Stone Unit II is a viable, low-cost means for the Big Stone II Members to meet this need. Furthermore, the beneficial results produced by acquiring 30 MW of Big Stone Unit II capacity above the current allocation of the Big Stone II Members underscores the need of the members to obtain low-cost, baseloaded capacity.

APPENDICES

The following appendices are included to provide supplemental information regarding portions of this Resource Expansion Analysis:

Appendix A: Load Forecast Statistical Output

Appendix B: Big Stone II Member Load Forecast Tables and Charts

Appendix C: Historical Weather Data

Appendix D: Big Stone II Member Economic Data

Appendix A LOAD FORECAST STATISTICAL OUTPUT

Appendix A Statistical Output

		Member	County
Member	County	Abbreviation	Abbreviation
Blue Earth	Faribault	BE	FAR
Delano	Wright	DE	WRI
Fairfax	Renville	FA	RENV
Glencoe	McLeod	GL	MCLE
Granite Falls	Yellow Medicine	GR	YELL
Janesville	Waseca	JA	WAS
Kasson	Dodge	KA	DODG
Kenyon	Goodhue	KE	GOOD
Mountain Lake	Cottonwood	МО	COTT
Sleepy Eye	Brown	SL	BROW
Springfield	Brown	SP	BROW
Willmar	Kandiyohi	WI	KAND
Windom	Cottonwood	. WN	COTT

Variable Key Codes						
CDD	Cooling Degree Days (Minneapolis - St. Paul Airport)					
GDP	Gross Domestic Product					
HDD	Heating Degree Days (Minneapolis - St. Paul Airport)					
NEL	Net Energy Requirements					
PY	Total Personal Income					
RETSAL	Total Retail Sales					

Statistical Output Syntax Guide
Variable: County Abbreviation (if applicable), then Variable Key Code.
Example: FARGDP = Faribault County Gross Domestic Product

Statistical Output: Blue Earth

Dependent Variable: LOG(BE_NEL)						
Method: Least Squares	3					
Date: 05/19/06 Time:	15:22					
Sample: 1990 2005						
Included observations:	16					
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
<u> </u>						
С	7.56	0.40	18.76	0.00		
LOG(FARGDP)	0.52	0.05	9.62	0.00		
CDD	8.57E-05	6.76E-05	1.27	0.23		
HDD	2.60E-05	2.48E-05	1.05	0.32		
R-squared	0.92	Mean dep	endent var	10.84		
Adjusted R-squared	0.90	S.D. depe	ndent var	0.14		
S.E. of regression	0.04	Akaike info	o criterion	(3.22)		
Sum squared resid	0.02	Schwarz c	riterion	(3.03)		
Log likelihood	29.80	F-statistic		44.98		
Durbin-Watson stat	1.57	Prob(F-sta	itistic)	0.00		

Statistical Output: Delano

Dependent Variable: LOG(DE_NEL)							
Method: Least Square							
Date: 05/18/06 Time:	00:15						
Sample: 1990 2005	4.0						
Included observations	: 16						
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
С	4.05	0.16	25.24	0.00			
LOG(WRIRETSAL)	0.95	0.03	36.66	0.00			
CDD	7.57E-05	3.81E-05	1.99	0.07			
R-squared	0.99	Mean dep	endent var	10.43			
Adjusted R-squared	0.99	S.D. depe	endent var	0.27			
S.E. of regression	0.02	Akaike inf	Akaike info criterion (4.4)				
Sum squared resid	0.01	Schwarz (criterion	(4.29)			
Log likelihood	38.48	F-statistic	;	947.62			
Durbin-Watson stat	2.11	Prob(F-sta	atistic)	0.00			

Statistical Output: Fairfax

Dependent Variable: LOG(FA_NEL)							
Method: Least Square	s						
Date: 05/18/06 Time	: 00:35			i			
Sample: 1990 2005							
Included observations	: 16						
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
C ·	8.07	0.25	31.76	0.00			
LOG(RENVGDP)	0.16	0.04	4.45	0.00			
CDD	2.73E-05	. 3.33E-05	0.82	0.43			
DDH	5.35E-05	1.28E-05	4.18	0.00			
R-squared	0.72	Mean dep	endent var	9.42			
Adjusted R-squared	0.65	S.D. depe	ndent var	0.04			
S.E. of regression	0.02	Akaike inf	Akaike info criterion (4.52				
Sum squared resid	0.01	Schwarz d	criterion	(4.32)			
Log likelihood	40.14	F-statistic		10.41			
Durbin-Watson stat	1.81	Prob(F-sta	atistic)	0.00			

Statistical Output: Glencoe

Dependent Variable: LOG(GL_NEL)									
Method: Least Squares									
Date: 05/18/06									
Sample: 1990 2005									
Included observations:	16								
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
С	3.23		5.17	0.00					
LOG(MCLEPY)	1.15	0.09	12.88	0.00					
CDD	1.07E-04	4.36E-05	2.46	0.03					
HDD	3.05E-05	1.59E-05	1.92	0.08					
YEAR>2003	(0.12)	0.02	(4.91)	0.00					
R-squared	0.95	Mean dep	endent var	11.19					
Adjusted R-squared	0.94	S.D. depe	ndent var	0.12					
S.E. of regression	0.03	Akaike inf	o criterion	(3.97)					
Sum squared resid	0.01	` '							
Log likelihood	36.76	F-statistic		56.94					
Durbin-Watson stat	2.28	Prob(F-sta	atistic)	0.00					

Statistical Output: Granite Falls

Dependent Variable: LOG(GR_NEL)										
Method: Least Squares										
Date: 05/18/06 Time: 01:10										
Sample: 1990 2005	Sample: 1990 2005									
Included observations	: 16									
Variable ·	Coefficient	Std. Error	t-Statistic	Prob.						
С	8.28	1.33	6.25	0.00						
LOG(YELLPY)	0.34	0.23	1.47	0.17						
CDD	8.99E-05	8.66E-05	1.04	0.32						
HDD	1.68E-05	3.30E-05	0.51	0.62						
R-squared	0.26		endent var	10.31						
Adjusted R-squared	0.08	S.D. depe	ndent var	0.06						
S.E. of regression	0.06	Akaike inf	o criterion	(2.56)						
Sum squared resid	0.04	Schwarz criterion (2.37								
Log likelihood	24.47	F-statistic		1.43						
Durbin-Watson stat	1.37	Prob(F-sta	atistic)	0.28						

Statistical Output: Janesville

Dependent Variable: LOG(JA NEL)									
Method: Least Squares Date: 05/18/06 Time: 09:47 Sample: 1991 2005 Included observations: 15									
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
C LOG(WASRETSAL) CDD	5.88 0.70 1.56E-04	0.28 0.06 3.44E-05	20.65 11.13 4.53	0.00 0.00 0.00					
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood	0.95 0.94 0.02 0.01 37.04	Mean dep S.D. depe Akaike inf Schwarz o F-statistic	9.28 0.10 (4.54) (4.40) 114.73						
Durbin-Watson stat	1.72	Prob(F-sta	atistic)	0.00					

Statistical Output: Kasson

Dependent Variable: LOG(KA_NEL)									
Method: Least Squares									
Date: 05/18/06 Time: 10:43									
Sample: 1990 2005									
Included observations:	: 16								
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
	0.07	0.54	4.04	0.00					
C	2.37	0.54	4.34	0.00					
LOG(DODGPY)	1.21	0.08	14.81	0.00					
CDD	1.15E-04	7.61E-05	1.51	0.16					
HDD	5.39E-05	2.60E-05	2.07	0.06					
R-squared	0.97	Mean dep	endent var	10.05					
Adjusted R-squared	0.96	S.D. depe	ndent var	0.23					
S.E. of regression	0.05	Akaike inf	o criterion	(3.03)					
Sum squared resid	0.03	Schwarz o	criterion	(2.84)					
Log likelihood	28.23	F-statistic		111.31					
Durbin-Watson stat	2.54	Prob(F-sta	atistic)	0.00					

Statistical Output: Kenyon

Dependent Variable: LOG(KE_NEL)
Method: Least Squares
Date: 05/18/06 Time: 16:07 Sample(adjusted): 1991 2005

Included observations: 15 after adjusting endpoints Convergence achieved after 18 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C LOG(GOODPY) CDD HDD AR(1)	1.52 1.13 8.86E-05 2.34E-05 0.57	1.28 0.18 3.19E-05 1.50E-05 0.21	1.18 6.37 2.78 1.56 2.77	0.26 0.00 0.02 0.15
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood	0.97 0.96 0.02 0.01 37.68	Mean dep S.D. depe Akaike info Schwarz o F-statistic	9.60 0.12 (4.36) (4.12) 84.64	
Durbin-Watson stat	1.46	Prob(F-sta	atistic)	0.00

Statistical Output: Mountain Lake

Dependent Variable: LOG(MO_NEL)										
Method: Least Squares										
Date: 05/18/06 Time: 11:35										
Sample: 1990 2005										
Included observations:	16									
Variable	Coefficient	Std. Error	t-Statistic	Prob.						
c	4.88	0.65	7.52	0.00						
LOG(COTTGDP)	0.84	0.12	6.95	0.00						
CDD	3.40E-04	1.05E-04	3.23	0.01						
1000	01.02 0.			2						
R-squared	0.87	Mean dep	endent var	9.79						
Adjusted R-squared	0.85	S.D. depe	endent var	0.19						
S.E. of regression	0.07	Akaike inf	o criterion	(2.24)						
Sum squared resid	0.07	Schwarz criterion (2.09								
Log likelihood	20.90	F-statistic		42.34						
Durbin-Watson stat	2.43	Prob(F-st		0.00						

Statistical Output: Sleepy Eye

Dependent Variable: LOG(SL_NEL)									
Method: Least Squares									
Date: 05/18/06 Time: 11:47									
Sample: 1990 2005									
Included observations: 16									
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
С	7.18	0.33	21.60	0.00					
LOG(BROWGDP)	0.49	0.05	10.67	0.00					
CDD	8.91E-05	4.08E-05	2.18	0.05					
HDD	1.44E-05	1.44E-05	1.00	0.34					
R-squared	0.93	Mean dep	endent var	10.62					
Adjusted R-squared	0.92	S.D. depe	ndent var	0.09					
S.E. of regression	0.03	Akaike inf	o criterion	(4.18)					
Sum squared resid	0.01	Schwarz o	criterion	(3.98)					
Log likelihood	37.41	F-statistic		56.55					
Durbin-Watson stat	1.60	Prob(F-sta	atistic)	0.00					

Statistical Output: Springfield

Dependent Variable: LOG(SP_NEL)									
Method: Least Squares									
Date: 05/19/06 Time: 09:02									
Sample: 1990 2005									
Included observations:	16		F ₁						
			*						
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
1 4114010	Coomocin	Old. Elifoi	t-Otatistic	r tob.					
С	6.69	0.39	17.00	0.00					
LOG(BROWRETSAL)	0.60	0.07	8.09	0.00					
CDD		4.86E-05	2.87	0.01					
YEAR>2003	0.06	0.03	2.32	0.04					
,	0.00	0.00	2.02	0.04					
R-squared	0.95	Mean dep	endent var	10.14					
Adjusted R-squared	0.94	S.D. depe		0.12					
S.E. of regression	0.03	Akaike infe		(3.96)					
Sum squared resid	0.01	(0,00							
Log likelihood	35.68	Schwarz criterion (3.77							
•				73.65					
Durbin-Watson stat	1.34	Prob(F-sta	atistic)	0.00					

Statistical Output: Wilmar

Dependent Variable: LOG(WI_NEL)										
Method: Least Squares										
Date: 05/18/06 Time: 12:10										
Sample: 1990 2005	Sample: 1990 2005									
Included observations:	16			- 1						
Variable	Coefficient	Std. Error	t-Statistic	Prob.						
С	5.18	0.47	10.91	0.00						
LOG(KANDPY)	1.01	0.07	15.37	0.00						
CDD	6.59E-05	4.43E-05	1.49	0.16						
HDD	3.52E-05	1.54E-05	2.29	0.04						
R-squared	0.97	Mean dep	endent var	12.39						
Adjusted R-squared	0.96	S.D. depe	ndent var	0.14						
S.E. of regression	0.03	Akaike info	o criterion	(4.06)						
Sum squared resid	0.01	· • • • • • • • • • • • • • • • • • • •								
Log likelihood	36.52	F-statistic		111.86						
Durbin-Watson stat	1.39	Prob(F-sta	atistic)	0.00						

Statistical Output: Windom

Dependent	Variable	LOG/M/N	MELL
Debendeur	variable.	FOG(AAIA	MEL

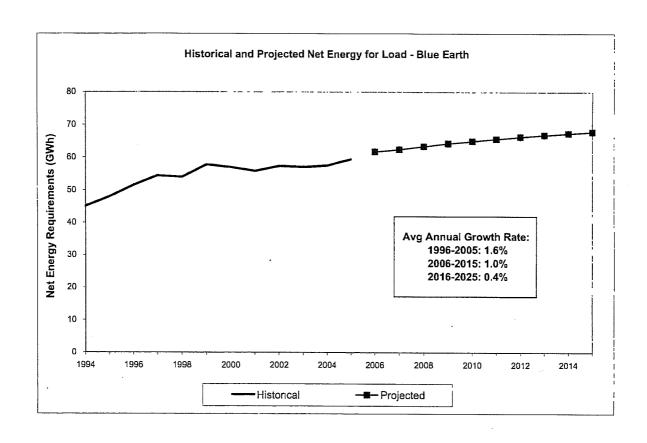
Method: Least Squares Date: 05/18/06 Time: 12:25 Sample(adjusted): 1991 2005

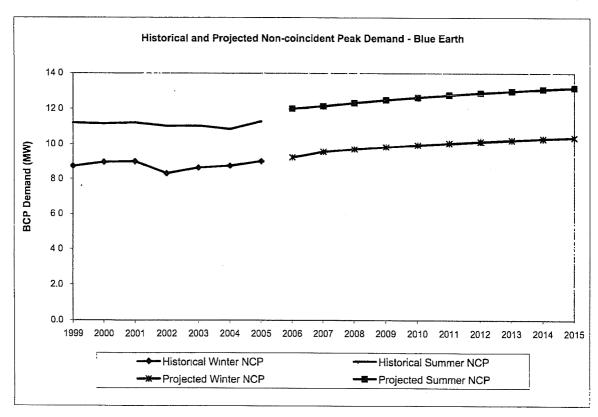
Included observations: 15 after adjusting endpoints

Convergence achieved after 7 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.			
C	9.49	0.98	9.63	0.00			
LOG(COTTGDP)	0.28	0.16	1.80	0.10			
CDD	7.68E-05	3.78E-05	2.03	0.07			
AR(1)	0.87	0.09	10.10	0.00			
R-squared	0.97	Mean dep	11.00				
Adjusted R-squared	0.96	S.D. depe	0.14				
S.E. of regression	0.03	Akaike inf	(3.96)				
Sum squared resid	0.01	Schwarz d	(3.77)				
Log likelihood	33.66	F-statistic	104.85				
Durbin-Watson stat	1.99	Prob(F-sta	Prob(F-statistic)				

Appendix B BIG STONE II MEMBER LOAD FORECAST TABLES AND CHARTS





Blue Earth
Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	y Requireme	ents (CY)		Non-Coincident Peak Demand				С		
	•	Actual		Normalized		Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	51,547	-	51,105	-	-0 9%	8.2	•	71 8%	10.3	•	57.1%	#N//
	1997	54,409	.5 6%	54,692	7 0%	0 5%	8.3	0 7%	75 2%	10.5	1 9%	59.2%	#N//
	1998	54,021	-0.7%	55,629	17%	3 0%	8 2	-1 1%	75.5%	10.6	1.4%	58 0%	#N//
<u> </u>	1999	57,811	7.0%	59,061	6 2%	2 2%	8 7	6 8%	75.6%	11.2	5 3%	58 9%	#N//
Historical	2000	57,009	-1 4%	57,686	-2 3%	1 2%	90	2.7%	72.6%	11.2	-0 4%	58 3%	#N//
stc	2001	55,870	-2 0%	55,860	-3 2%	0 0%	9 0	0 4%	70.9%	11.2	0 5%	56 9%	#N//
Ī	2002	57,374	2 7%	56,613	1 3%	-1 3%	8 3	-7.7%	78.8%	11.0	-1 7%	59 4%	#N//
	2003	57,103	-0 5%	56,744	0 2%	-0.6%	86	4 1%	75 4%	11 0	0 1%	59 1%	#N//
	2004	57,585	0 8%	59,116	4.2%	27%	8 7	1 2%	75 1%	10 9	-1 6%	60 6%	#N//
	2005	59,482	3 3%	59,290	0 3%	-0.3%	9 0	3 0%	75 3%	11.3	4 1%	60 1%	#N//
	2006	61,767	3 8%	61,767	4.2%		92	2 5%	76.3%	12 0	6.4%	58.7%	8 9
	2007	62,457	1 1%	62,457	1 1%		9.6	3 4%	74 6%	12 1	1.1%	58.7%	9 0
	2008	63,404	1.5%	63,404	1.5%		9.7	1 5%	74.6%	12 3	1 5%	58.7%	9.1
	2009	64,292	1.4%	64,292	1.4%		9.8	1 4%	74 6%	12.5	1 4%	58.7%	92
	2010	65,002	1.1%	65,002	1 1%		10.0	1 1%	74 6%	126	1.1%	58.7%	9.3
	2011	65,692	1.1%	65,692	1.1%		10.1	1.1%	74.6%	12 8	1.1%	58.7%	9 4
	2012	66,332	1 0%	66,332	1 0%		10.2	1.0%	74 6%	12.9	1 0%	58.7%	9 5
	2013	66,860	0 8%	66,860	0 8%		10.2	0.8%	74 6%	13.0	0 8%	58 7%,	96
Ţ	2014	67,359	0 7%	67,359	0 7%		103	0 7%	74.6%	13.1	0.7%	58 7%	97
Projected	2015	67,811	0 7%	67,811	0 7%		10.4	0 7%	74 6%	13.2	0.7%	58 7%	97
ō.	2016	68,230	0 6%	68,230	0.6%		10 4	0 6%	74.6%	13 3	0 6%	58.7%	9 8
₫.	2017	68,695	0 7%	68,695	0.7%		10.5	0 7%	74.6%	13.4	0.7%	58 7%	9 9
	2018	69,066	0 5%	69,066	0.5%		10.6	0 5%	74 6%	13 4	0 5%	58 7%	99
	2019	69,315	0 4%	69,315	0.4%		10.6	0.4%	74 6%	13 5	0.4%	58.7%	10 0
	2020	69,545	0.3%	69,545	0 3%		10.6	0 3%	74 6%	13 5	0.3%	58.7%	10 0
	2021	69,731	0 3%	69,731	0,3%		10 7	0 3%	74 6%	13 6	0 3%	58.7%	10.0
	2022	69,960	0.3%	69,960	0 3%		10 7	0 3%	74.6%	13.6	0 3%	58 7%	10 1
	2023	70,217	0.4%	70,217	0 4%		10 7	0 4%	74 6%	13 7	0 4%	58 7%	10 1
	2024	70,409	0.3%	70,409	0 3%		10 8	0 3%	74 6%	137	0 3%	58.7%	10 1
	2025	70,605	0.3%		0.3%		108	0 3%	74 6%	13 7	0 3%	58 7%	10 1
œ	Thru 2005		1 6%		1 7%			1.1%	74 6%		10%	58.8%	
AAGR	2006-2015		1 0%		1.0%			1.3%	74 7%		1.0%	58.7%	
₹	2016-2025		0 4%		0 4%			0 4%	74.6%		0 4%	58.7%	

Blue Earth Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Total
	1996	#N/A												
	1997	#N/A												
	1998	#N/A												
77	1999	#N/A												
Historical	2000	#N/A												
š	2001	#N/A												
Ī	2002	4,644	4,075	4,538	4,350	4,273	5,390	6,291	5,614	5,031	4,378	4,223	4,567	57,374
	2003	4,896	4,327	4,527	4,184	4,195	4,881	5,949	5,961	4,880	4,417	4,185	4,701	57,103
	2004	5,003	4,542	4,588	4,181	4.331	5,026	5,769	5,240	5,146	4,543	4,410	4,803	57,585
	2005	4,892	4,206	4,539	4,244	4,432	5,469	6,330	6,077	5,357	4,619	4,325	4,993	59,482
	2006	5,185	4,577	4,854	4,525	4,596	5,538	6,492	6,106	5,444	4,790	4,574	5,084	61,767
	2007	5,243	4,628	4,908	4,576	4,648	5,600	6,565	6,174	5,505	4,844	4,625	5,141	62,457
	2008	5,323	4,698	4,983	4,645	4,718	5,685	6,664	6,268	5,589	4,917	4,695	5,219	63,404
a d	2009	5,397	4,764	5,053	4,710	4,784	5,765	6,758	6,355	5,667	4,986	4,761	5,292	64,292
Projected	2010	5,457	4,816	5,108	4,762	4,837	5,828	6,832	6,426	5,729	5,041	4,813	5,351	65,002
ē	2011	5,515	4,868	5,163	4,813	4,889	5,890	6,905	6,494	5,790	5,095	4,865	5,408	65,692
Ē	2012	5,569	4,915	5,213	4,860	4,936	5,948	6,972	6,557	5,847	5,144	4,912	5,460	66,332
	2013	5,613	4,954	5,254	4,898	4,975	5,995	7,027	6,609	5,893	5,185	4,951	5,504	66,860
	2014	5,655	4,991	5,294	4,935	5,013	6,040	7,080	6,659	5,937	5,224	4,988	5,545	67,359
	2015	5,693	5,025	5,329	4,968	5,046	6,080	7,127	6,703	5,977	5,259	5,021	5,582	67,811
	2016	5,728	5,056	5,362	4,999	5,077	6,118	7,171	6,745	6,014	5,291	5,052	5,616	68,230
	2017	5,767	5,090	5,399	5,033	5,112	6,159	7,220	6,791	6,055	5,328	5,087	5,655	68,695
	2018	5,798	5,118	5,428	5,060	5,140	6,193	7,259	6,827	6,088	5,356	5,114	5,685	69,066
g	2019	5,819	5,136	5,447	5,078	5,158	6,215	7,286	6,852	6,110	5,376	5,133	5,706	69,315
Projected	2020	5,838	5,153	5,465	5,095	5,175	6,236	7,310	6,875	6,130	5,393	5,150	5,725	69,545
ē	2021	5,854	5,167	5,480	5,109	5,189	6,252	7,329	6,893	6,146	5,408	5,164	5,740	69,731
Ω.	2022	5,873	5,184	5,498	5,126	5,206	6,273	7,353	6,916	6,166	5,426	5,181	5,759	69,960
	2023	5,895	5,203	5,518	5,144	5,225	6,296	7,380	6,941	6,189	5,446	5,200	5,780	70,217
	2024	5,911	5,217	5,533	5,158	5,240	6,313	7,400	6,960	6,206	5,460	5,214	5,796	70,409
	2025	5,927	5,232	5,549	5,173	5,254	6,331	7,421	6,979	6,223	5,476	5,228	5,812	70,605

Monthly Energy Allocation Factors

	Year	Jan	Feb_	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A						
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A						
	1998	#N/A	#N/A	#N/A	#N/A .	#N/A	#N/A	#N/A						
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A						
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A						
st	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A						
Ŧ	2002	8 1%	71%	7 9%	7 6%	7 4%	9 4%	11 0%	9 8%	8 8%	7 6%	7 4%	8 0%	100 0%
	2003	8 6%	7 6%	7 9%	7 3%	7 3%	8 5%	10 4%	10 4%	8 5%	7 7%	7 3%	8 2%	100 0%
	2004	8 7%	7 9%	8 0%	7 3%	7 5%	8 7%	10 0%	9 1%	8 9%	7 9%	7 7%	8 3%	100 0%
	2005	8 2%	7 1%	7 6%	7 1%	7 5%	9 2%	10 6%	10 2%	_ 9 0%	7 8%	7 3%	8 4%	100 0%
	2006	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
	2007	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
	2008	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
Ţ	2009	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
rojected	2010	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
ĕ	2011	8 4%	74%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
Ď.	2012	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
	2013	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 B%	7 4%	8 2%	100 0%
	2014	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
	2015	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%
gin	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A						
Avg	2006-2015	8 4%	7 4%	7 9%	7 3%	7 4%	9 0%	10 5%	9 9%	8 8%	7 8%	7 4%	8 2%	100 0%

Blue Earth Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
_	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
ro.	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
윭	2001	#N/A	#N/A	#N/A	#N/A	78	112	11 2	11 2	106	83	83	83	#N/A
Ĩ	2002	8.3	83	83	92	98	110	110	10 B	11 0	7 9	8 1	83	83
	2003	86	85	8 2	8 4	83	10 7	110	109	10 4	84	77	87	86
	2004	86	84	8 2	80	83	10 7	10 9	10 6	108	85	8 1	90	87
	2005	8 5	8 1	79	7 9	8 2	11.3	11 1	10 8	107	10 1	7.9	9 1	90
-	2006	9.2	90	. 87	87	93	119	12 0	117	11 7	10 0	90	96	9 2
	2007	93	91	88	88	94	120	12 1	119	119	10 1	92	97	96
	2008	95	93	89	90	95	12 2	123	12 0	120	103	93	98	97
ğ	2009	96	94	91	9 1	97	12 4	12 5	12 2	122	104	94	10 0	8 9
Projected	2010	97	95	92	92	98	12 5	12 6	12 3	123	10 5	95	10 1	10 0
꼂	2011	9.8	96	93	93	99	126	128	12 5	125	10 7	96	10 2	10 1
ď.	2012	99	9.7	93	94	100	128	129	12 6	126	108	97	10 2	10.2
	2013	10 0	98	94	9 5	10 0	129	130	12 7	127	108	97	10 3	10.2
	2014	10 1	98	9 5	95	10 1	13 0	13 1	128	128	109	98	10 4	103
	2015	10 1	99	96	96	10 2	13 1	13 2	12 9	129	110	99	10 4	104
	2016	10 2	10 0	96	9 7	10 2	13 1	133	13 0	13 0	11 1	99	10 5	10 4
	2017	10 3	10 0	97	97	10 3	13 2	13 4	13 1	13 1	11 1	10 0	106	10 5
	2018	10 3	10 1	97	98	10 4	13 3	13 4	13 1	13 1	112	10 0	10 6	10 6
Ď	2019	10 4	10 1	98	98	10 4	13 3	13 5	13 2	132	112	10 1	106	10 6
Projected	2020	10 4	10 2	98	9.8	10 4	13 4	13 5	13 2	132	113	10 1	10 7	10 6
픙	2021	10 4	10 2	98	99	105	13 4	13 6	13 2	13 2	113	10 1	107	10 7
ă.	2022	10 5	10 2	99	99	10 5	13 5	136	133	133	113	10 2	10.7	10 7
	2023	10 5	10 3	99	99	10 5	13 5	13 7	13 3	133	11 4	10 2	108	10 7
	2024	10 5	10 3	99	10 0	106	13 6	13 7	13 4	134	11 4	10 2	10 8	10 8
	2025	10_6	10 3	10 0	10 0	106	13 <u>6</u>	13 7	13 4	13 4	11.5	10 2	10 8	10.8

Monthly Load Factors

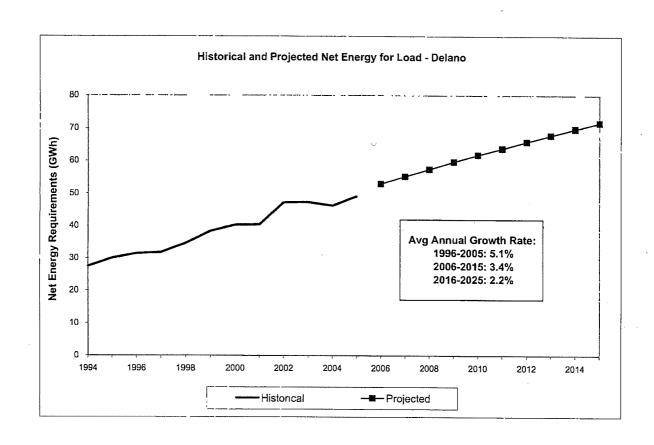
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996									-				
	1997													
	1998													
75	1999													
Historical	2000													
St	2001													
Ŧ	2002	75 6%	73 4%	73 8%	65 5%	58 3%	68 1%	76 7%	69 7%	63 8%	74 2%	72 9%	73 7%	78 8%
	2003	76 1%	75 6%	73 9%	69 3%	67 6%	63 4%	72 5%	73 6%	65 4%	70 4%	75 1%	72 2%	75 4%
	2004	78 3%	78 0%	75 2%	72 7%	70 4%	65 1%	71 5%	66 2%	66 1%	71 9%	75 7%	71 6%	75 1%
	2005	77 2%	77 0%	77 5%	74 6%	72 4%	67 3%	76 9%	75 5%	69 5%	61 4%	76 4%	74 0%	75 3%
	2006	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 3%	71 5%	76 3%
	2007	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 0%	71 2%	74 6%
	2008	75 4%	72 9%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 1%	71 3%	74 6%
B	2009	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 3%	71 5%	74 6%
Projected	2010	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 3%	71 5%	74 6%
ŏ	2011	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 4%	71 6%	74 6%
ō.	2012	75 4%	72 9%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 5%	71 7%	74 6%
	2013	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 5%	71 7%	74 6%
	2014	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 6%	71 8%	74 6%
	2015	75 4%	75 5%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 6%	71 8%	74 6%
Avg.	1996-2005	76 8%	76 0%	75 1%	70 5%	67 2%	66 0%	74 4%	71 2%	66 2%	69 5%	75 0%	72 9%	76 2%
ĕ	2006-2015	75 4%	75 0%	74 9%	71 9%	66 6%	64 7%	72 7%	69 9%	64 4%	64 3%	70 4%	71 6%	74 7%

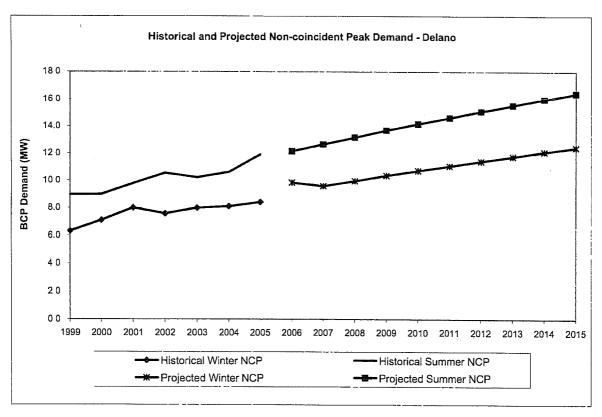
Blue Earth Monthly Coincident-Peak Demand (MW)

_	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk	s
-	2006	89	87	8 2	8 5	8 9	11 3	11 7	11 1	11 4	9 7	88	94	89	
	2007	90	88	83	86	90	11 4	119	11 3	115	98	8 9	96	90	
	2008	91	89	8 4	87	91	116	120	11 4	117	99	90	97	9 1	
Z.	2009	92	9 1	8 5	89	93	11 7	12 2	11 6	119	10 1	91	98	92	
퓽.	2010	93	92	86	90	94	11 9	123	11 7	120	10 2	92	99	93	
Projected	2011	94	93	87	90	95	12 0	12 5	. 119	12 1	103	93	10 0	9 4	
ā.	2012	95	94	88	91	96	12 1	126	12 0	122	10 4	94	10 1	9 5	
	2013	96	9 4	89	92	96	12 2	127	12 1	123	10 5	95	10 2	96	
	2014	97	9 5	8 9	93	97	12 3	128	12 2	12 4	10 5	95	10 2	97	
	2015	9 7	96	9 0	93	9.8	12 4	12 <u>9</u>	12 2	12 5	106	96	10 3	9 7	
	2016	98	96	9 1	94	98	125	13 0	12 3	126	107	96	10 4	8 8	
	2017	99	97	91	95	99	12 5	130	12 4	12 7	10 7	97	10 4	99	
	2018	99	97	92	95	100	12 6	13 1	12 5	127	108	97	10 5	99	
70	2019	100	98	92	95	100	12 6	13 2	12 5	128	108	98	10 5	10 0	
ថ្ង	2020	10 0	98	92	96	100	12 7	13 2	12 5	12 8	10 9	98	10 5	10 0	
Projected	2021	100	98	93	96	10 1	12 7	13 2	12 6	129	10 9	98	10 6	100	
4	2022	10 1	99	93	96	10 1	128	133	12 6	12 9	10 9	99	10 6	10 1	
	2023	10 1	99	93	97	10 1	128	133	12 7	12 9	11 0	99	106	10 1	
	2024	10 1	99	93	97	10 1	12 8	13.4	12 7	13 0	11 0	99	10 7	10 1	
	2025	10 1	100	94	97	102	129	134	12.7	130	110	99	10 7	10 1	

Monthly Coincidence Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk	S
	2006	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	96 0%	
	2007	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
	2008	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
豆	2009	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
支	2010	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
ĕ	2011	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
ď.	2012	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
	2013	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
	2014	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
	2015	96 0%	96 6%	94 1%	97 3%	96 0%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	93 9%	
	2006-2015	96 0%	96 6%	94 1%	97 3%	96 6%	94 8%	97 7%	95 0%	97 1%	96 4%	97 0%	98 6%	94 1%	





Delano
Historical and Projected Net Energy Requirements and Peak Demand

Tes .	Year 1996 1997 1998 1999	Actual (MWh) 31,428 31,818	Percent Change	Normalized (MWh)	Percent	Percent	Winter						
	1996 1997 1998	31,428		/8/38/6A		I CIOCIIL	AAILIFE	Percent	Load	Summer	Percent	Load	Winter
	1997 1998			(141AA11)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1998	31,818	-	31,660		0.7%	5.7	-	63.4%	70	•	51 0%	#N/A
			1.2%	32,033	1 2%	0.7%	58	2 9%	62.4%	73	3.4%	49 9%	#N/A
rical	1999	34,634	8.9%	34,480	7 6%	-0 4%	59	2 1%	66.6%	8 1	11 1%	48 9%	#N/A
본 :		38,396	10 9%	38,202	10.8%	-0 5%	6 3	6 4%	69 4%	9.0	10.9%	48.9%	#N/A
	2000	40,311	5 0%	40,296	5 5%	0 0%	7.1	12 5%	64.7%	90	0 2%	51 2%	#N/A
isto	2001	40,459	0 4%	39,782	-1 3%	-1 7%	0.8	12 5%	57 7%	9.8	8 9%	47 2%	#N/A
I :	2002	47,242	16.8%	46,224	16 2%	-2 2%	76	-5 4%	71 3%	10.5	7.8%	51.1%	#N/A
;	2003	47,366	0 3%	46,725	1 1%	-1 4%	8 0	5 5%	67.7%	10.2	-3 1%	52 9%	#N/A
	2004	46,262	-2.3%	46,687	-0 1%	0 9%	8 1	1 5%	65.2%	10.6	3.8%	49 8%	#N/A
	2005	49,162	6 3%	48,051	29%	-2 3%	8 4	3.9%	66 7%	11 9	12 3%	47 1%	#N/A
	2006	52,972	7 7%	52,972	10 2%		98	17 0%	61 4%	12.1	1 9%	49.8%	87
	2007	55,223	4 2%	55,223	4.2%		96	-2.7%	65 8%	127	4 2%	49.8%	9 1
	2008	57,414	4 0%	57,414	4.0%		10 0	4.0%	65 8%	13 2	4 0%	49.8%	9 4
	2009	59,741	4 1%	59,741	4 1%		10 4	4.1%	65 8%	137	4.1%	49.8%	98
	2010	61,804	3 5%	61,804	3.5%		10 7	3.5%	65 8%	14 2	3 5%	49.8%	10.1
	2011	63,757	3 2%	63,757	3.2%		11 1	3.2%	65 8%	14 6	3.2%	49.8%	10 5
	2012	65,822	3 2%	65,822	3 2%		11 4	3.2%	65 8%	15.1	3.2%	49 8%	10 8
	2013	67,795	3 0%	67,795	3 0%		11.8	3 0%	65.8%	15 5	3.0%	49 8%	11 1
Ď	2014	69,745	2 9%	69,745	29%		12 1	2 9%	65.8%	16 0	2.9%	49 8%	11 4
Projected	2015 _	71,628	2 7%	71,628	27%		12.4	2 7%	65.8%	16 4	2 7%	49 8%	11 7
ē	2016	73,383	2.5%	73,383	2 5%		12 7	2 5%	65.8%	16 8	2 5%	49 8%	12.0
a.	2017	75,193	2.5%	75,193	2 5%		13 0	2 5%	65 8%	17 2	2 5%	49 8%	12.3
	2018	76,944	2 3%	76,944	2 3%		13 4	2 3%	65 8%	17.6	2 3%	49 8%	12.6
	2019	78,702	2.3%	78,702	2 3%		13.7	2.3%	65 8%	18.0	2 3%	49 8%	12 9
	2020	80,458	2 2%	80,458	2 2%		14 0	2.2%	65 8%	18.5	2 2%	49 8%	13 2
	2021	82,226	2.2%	82,226	2 2%		14 3	2.2%	65 8%	18.9	2.2%	49.8%	13 5
	2022	83,989	2 1%	83,989	21%		14 6	2.1%	65 8%	193	2 1%	49.8%	13 8
	2023	85,784	2 1%	85,784	21%		14 9	2 1%	65 8%	197	2.1%	49 8%	14 1
	2024	87,536	2.0%	87,536	2 0%		15 2	2 0%	65 8%	20 1	2.0%	49 8%	14 4
	2025	89,326	2 0%	89,326	2 0%		15.5	2 0%	65.8%	20 5	2.0%	49 8%	14 6
r <u>c</u> Th	ıru 2005		5 1%		47%			4 5%	65.5%		6 0%	49 8%	
AAGR 20	06-2015		3.4%		34%			2 6%	65.3%		3 4%	49 8%	
⋖ 20	16-2025		2.2%		2 2%			2 2%	65 8%		2 2%	49.8%	

Delano Monthly Net Energy Requirements (MWh)

_	Yea <u>r</u>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Total
_	1996	#N/A	#N/.											
	1997	#N/A	#N/,											
	1998	#N/A	#N/,											
77	1999	#N/A	#N/,											
Historical	2000	#N/A	#N/,											
şţ	2001	#N/A	#N/,											
£	2002	3,985	3,489	3,730	3,600	3,577	4,062	4,927	4,195	3,982	3,956	3,710	4,028	47,24
	2003	4,183	3,747	3,836	3,562	3,564	3,824	4,536	4,622	3,830	3,779	3,726	4,156	47,36
	2004	4,309	3,878	3,879	3,473	3,394	3,651	4,302	3,917	3,912	3,640	3,711	4,195	46,26
_	2005	4,330	3,784	3 980	3 470	3 617	4,356	4,917	4,564	4,068	3 827	3,811	4,438	49,16
	2006	4,687	4,155	4,301	3,934	3,945	4,426	5,206	4,819	4,403	4,238	4,171	4,687	52,97.
	2007	4,886	4,332	4,483	4,101	4,113	4,615	5,427	5,024	4,590	4,418	4,348	4,886	55,22
	2008	5,080	4,504	4,661	4,264	4,276	4,798	5,642	5,223	4,772	4,594	4,520	5,080	57,41
ä	2009	5,285	4,686	4,850	4,437	4,449	4,992	5,871	5,435	4,965	4,780	4,704	5,286	59,74
ដ្ឋ .	2010	5,468	4,848	5,018	4,590	4,603	5,164	6,074	5,623	5,137	4,945	4,866	5,469	61,80
Projected	2011	5,641	5,001	5,176	4,735	4,748	5,328	6,265	5,800	5,299	5,101	5,020	5,642	63,75
ā.	2012	5,823	5,163	5,344	4,889	4,902	5,500	6,468	5,988	5,471	5,266	5,182	5,824	65,82
	2013	5 998	5 318	5 504	5 035	5 049	5 665	6 662	6,168	5,635	5,424	5,338	5,999	67,79
	2014	6,171	5,471	5,663	5,180	5.194	5,828	6,854	6,345	5,797	5,580	5,491	6,172	69,74
	2015	6,337	5,619	5,815	5,320	5,334	5,985	7,039	6,516	5,953	5,731	5,639	6,338	71,62
	2016	6,492	5,756	5,958	5,450	5,465	6,132	7,211	6,676	6,099	5,871	5,778	6,493	73,38
	2017	6,653	5,898	6,105	5,585	5,600	6,283	7,389	6,841	6,250	6,016	5,920	6,654	75,19
	2018	6,807	6,036	6,247	5,715	5,730	6,430	7,561	7,000	6,395	6,156	6,058	6,808	76,94
2	2019	6,963	6,174	6,390	5,845	5,861	6,577	7,734	7,160	6,541	6,297	6,196	6,964	78,70
ថ្ល	2020	7,118	6,311	6,532	5,976	5,992	6,723	7,907	7,319	6,687	6,437	6,335	7,119	80,45
Projected	2021	7,275	6,450	6,676	6,107	6,124	6,871	8,080	7,480	6,834	6,579	6,474	7,276	82,22
ų.	2022	7,431	6,588	6,819	6,238	6,255	7,018	8,254	7,641	6,981	6,720	6,613	7,432	83,98
	2023	7,589	6,729	6,965	6,371	6,389	7,168	8,430	7,804	7,130	6,864	6,754	7,591	85,78
	2024	7,745	6,867	7 107	6 501	6 519	7,315	8,602	7,963	7,276	7,004	6,892	7,746	87,53
	2025	7,903	7,007	7,252	6,634	6,652	7,464	8,778	8,126	7,424	7,147	7,033	7,904	89,32

Monthly Energy Allocation Factors

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N//
1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N//
1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N//
1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/i
2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N//
2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N//
2002	8 4%	7 4%	7 9%	76%	7 6%	8 6%	10 4%	8 9%	8 4%	8 4%	7 9%	8 5%	100 09
2003	8 8%	7 9%	8 1%	7 5%	7 5%	8 1%	96%	9 8%	8 1%	8 0%	7 9%	88%	100 09
2004	9 3%	8 4%	8 4%	7 5%	7 3%	7 9%	9 3%	8 5%	8 5%	7 9%	8 0%	9 1%	100 09
2005	8 8%	77%	8 1%	7 1%	7 4%	8 9%	10 0%	9 3%	8 3%	7 8%	7 8%	9 0%	100 09
2006	8 8%	7 8%	8 1%	74%	7 4%	8 4%	9 8%	9 1%	8 3%	8 0%	7 9%	8 8%	100 09
2007	8 8%	7 B%	8 1%	7 4%	7 4%	8 4%	9 8%	9 1%	8 3%	8 0%	7 9%	8 8%	100 09
2008	88%	7 8%	8 1%	74%	7 4%	8 4%	9 8%	9 1%	8 3%	8 0%	7 9%	8 8%	100 09
2009	8 8%	7 8%	8 1%	7 4%	7 4%	8 4%	98%	9 1%	8 3%	8 0%	7 9%	8 8%	100 0%
2010	8 8%	7 8%	8 1%	7 4%	7 4%	8 4%	98%	9 1%	8 3%	8 D%	7 9%	8 8%	100 0%
2011	8 8%	7 8%	8 1%	7 4%	7 4%	8 4%	98%	9 1%	B 3%	8 0%	7 9%	8 8%	100 ዐን
2012	8 8%	7 8%	8 1%	7 4%	7 4%	8 4%	98%	9 1%	B 3%	8 0%	7 9%	8 8%	100 09
2013	8 8%	7 8%	8 1%	7 4%	7 4%	8 4%	98%	9 1%	8 3%	8 0%	7 9%	8 8%	100 09
2014	8 8%	7 8%	8 1%	7 4%	7 4%	8 4%	98%	9 1%	8 3%	8 0%	7 9%	8 8%	100 0%
2015	8 8%	7 8%	8 1%	74%	7 4%	8 4%	9 8%	9 1%	8 3%	8 0%	7 9%	8 8%	100 09
1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
2006-2015	8 8 %	7 8%	8 1%	7 4%	7 4%	8 4%	9 8%	9 1%	8 3%	8 0%	7 9%	8 8%	100 0%
	1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 1996-2005	1996 #N/A 1997 #N/A 1998 #N/A 1998 #N/A 2000 #N/A 2001 #N/A 2002 8 4% 2003 8 8% 2005 8 8% 2006 8 8% 2006 8 8% 2010 8 8% 2010 8 8% 2010 8 8% 2011 8 8% 2012 8 8% 2011 8 8% 2012 8 8% 2013 8 8% 2014 8 8% 1996-2005 #N/A	1996 #N/A #N/A 1997 #N/A #N/A 1998 #N/A #N/A 1998 #N/A #N/A 1999 #N/A #N/A 2000 #N/A #N/A 2001 #N/A #N/A 2002 8 4% 7 4% 2003 8 8% 7 9% 2004 9 3% 8 4% 2005 8 8% 7 7% 2006 8 8% 7 8% 2007 8 8% 7 8% 2008 8 8% 7 8% 2010 8 8% 7 8% 2010 8 8% 7 8% 2010 8 8% 7 8% 2011 8 8% 7 8% 2011 8 8% 7 8% 2012 8 8% 7 8% 2013 8 8% 7 8% 2014 8 8% 7 8% 2014 8 8% 7 8% 2015 8 8% 7 8%	1996 #N/A #N/A #N/A #N/A 1997 #N/A #N/A #N/A #N/A 1998 #N/A #N/A #N/A 1999 #N/A #N/A #N/A 2000 #N/A #N/A #N/A 2001 #N/A #N/A #N/A 2002 8 4% 7 4% 7 9% 2003 8 8% 7 9% 8 1% 2004 9 3% 8 4% 8 4% 2005 8 8% 7 7% 8 1% 2006 8 8% 7 8% 8 1% 2007 8 8% 7 8% 8 1% 2008 8 8% 7 8% 8 1% 2010 8 8% 7 8% 8 1% 2010 8 8% 7 8% 8 1% 2011 8 8% 7 8% 8 1% 2011 8 8% 7 8% 8 1% 2012 8 8% 7 8% 8 1% 2013 8 8% 7 8% 8 1% 2013 8 8% 7 8% 8 1% 2014 8 8% 7 8% 8 1% 2015 8 8% 7 8% 8 1% 2015 8 8% 7 8% 8 1%	1996 #N/A #N/A #N/A #N/A #N/A 1997 #N/A #N/A #N/A #N/A 1998 #N/A #N/A #N/A #N/A 1999 #N/A #N/A #N/A #N/A 2000 #N/A #N/A #N/A #N/A 2000 #N/A #N/A #N/A #N/A #N/A 2001 #N/A #N/A #N/A #N/A 2002 8 4% 7 4% 7 9% 7 6% 2003 8 8% 7 9% 8 1% 7 5% 2004 9 3% 8 4% 8 4% 7 5% 2005 8 8% 7 7% 8 1% 7 1% 2006 8 8% 7 8% 8 1% 7 4% 2007 8 8% 7 8% 8 1% 7 4% 2008 8 8% 7 8% 8 1% 7 4% 2010 8 8% 7 8% 8 1% 7 4% 2010 8 8% 7 8% 8 1% 7 4% 2011 8 8% 7 8% 8 1% 7 4% 2012 8 8% 7 8% 8 1% 7 4% 2013 8 8% 7 8% 8 1% 7 4% 2013 8 8% 7 8% 8 1% 7 4% 2014 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4% 2015 8 8% 7 8% 8 1% 7 4%	1996 #N/A #N/A #N/A #N/A #N/A #N/A 1997 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A 1997 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1995 #N/A #N/A <td< td=""><td>1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></td<>	1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1995 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A

Delano Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/A	#N/A						
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	INIA
Ē	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ĕ	2000	AIM	#N/A	#NIA	AINH	#N/A	#NIA	AIN#	AINI	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2001	#N/A	#N/A	#N/A	#N/A	61	90	96	98	75	65	71	74	#N/A
Ĩ	2002	76	70	70	73	80	97	105	90	10 2	74	74	80	76
	2003	76	73	72	7 1	71	89	94	10 2	90	73	73	77	8.0
	2004	8 1	77	74	72	76	94	10 6	93	99	73	76	82	8 1
	2005	8 4	7 9	77	7 5	7.8	11 2	116	119	103	92	83	98	8.4
	2006	9 2	86	B 4	B 2	90	10.5	12 1	115	110	83	8 9	9 4	98
	2007	96	90	87	8 5	94	11 0	12 7	120	115	87	92	98	96
	2008	10 D	9 4	91	8 9	98	11.4	13 2	125	119	90	96	10 1	10 0
5	2009	10 4	97	94	9 2	10 2	119	13 7	130	12 4	94	99	10 5	10.4
Projected	2010	10 7	10 1	98	96	105	123	14 2	13 4	129	97	10 3	10 8	10.7
ĕ	2011	11 1	10 4	10 1	9 9	109	127	14 6	138	13 3	10 0	106	11 2	11 1
ã	2012	114	107	10.4	10 2	112	13 1	15 1	143	137	10 3	10 9	11 5	11 4
	2013	11 8	11 1	10 7	10 5	115	13 5	15 5	147	14 1	10 6	112	11 8	118
	2014	12 1	11 4	110	108	119	13 9	16 0	15 1	14 5	11 0	11 5	12 2	12 1
	2015	12.4	117	113	11 1	122	14 3	16 4	156	14 9	11 2	118	12 5	12.4
	2016	12 7	120	116	11 4	12 5	14 6	16 8	159	153	11.5	12 1	12 8	12 7
	2017	13 0	123	11 9	116	128	15 0	17 2	163	156	11 B	12 4	13 1	13.0
	2018	13 4	125	122	119	131	15 3	176	167	160	12 1	127	13 4	13 4
eg G	2019	13 7	128	12 4	12 2	13 4	15 7	180	17 1	18 4	12 4	12 9	13 7	13 7
뒳	2020	14 0	13 1	127	12 5	137	16 0	18 5	175	16 7	12 6	13 2	14 0	14 0
Projected	2021	14 3	13 4	130	127	140	16 4	18 9	17 9	17 1	129	13 5	14 3	14 3
ď.	2022	14 6	13 7	133.	. 130	143	16 7	193	182	17 5	13 2	13.8	14 6	14 6
	2023	14 9	14 0	136	13 3	146	17 1	19 7	186	17 9	13 5	14 1	14 9	14 9
	2024	15 2	14 3	138	136	14 9	17 4	20 1	190	182	137	14 4	15 2	15 2
	2025	15 5	14.6	14 1	13.8	15 2	17 8	20 5	194	186	14 0	14 7	15 5	15 5

Monthly Load Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Write Pk
	1996													
	1997													
	1998													
īg	1999													
뒫	2000									•				
Historical	2001													
Ĩ	2002	70 8%	74 2%	71 9%	68 1%	60 0%	58 2%	62 8%	62 4%	. 54 3%	718%	70 0%	67 B%	71 3%
	2003	73 7%	78 1%	71 2%	70 1%	67 4%	59 5%	65 2%	60 8%	58 8%	69 3%	70 8%	72 6%	67 7%
	2004	71 5%	71 9%	70 6%	66 8%	59 8%	53 7%	54 5%	56 7%	54 8%	66 9%	67 9%	68 8%	65 2%
	2005	69 2%	71 2%	69 8%	64 0%	62 6%	54 1%	57 0%	51 5%	54 6%	55 7%	63 7%	60 6%	66 7%
	200e	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 2%	67 2%	61 4%
	2007	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 4%	67 3%	65 8%
	2008	68 5%	69 1%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 3%	67 3%	65 8%
팖	2009	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 7%	67.7%	65 8%
Projected	2010	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 9%	67 9%	65 8%
5	2011	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 9%	67.8%	65 8%
ď	2012	68 5%	69 1%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	66 0%	68 0%	65 8%
	2013	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	66 1%	68 1%	65 8%
	2014	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	66 2%	68 2%	65 8%
	2015	68 5%	71 6%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	66 4%	68 3%	65 8%
Ė	1996-2005	71 3%	73 3%	70 9%	67 2%	62 4%	56 4%	59 9%	57 8%	55 7%	65 9%	68 1%	67 5%	67.7%
é	2006-2015	68 5%	71 1%	69 0%	66 6%	58 8%	58 3%	57 6%	56 3%	55 5%	68 5%	65 B%	67 8%	65 3%

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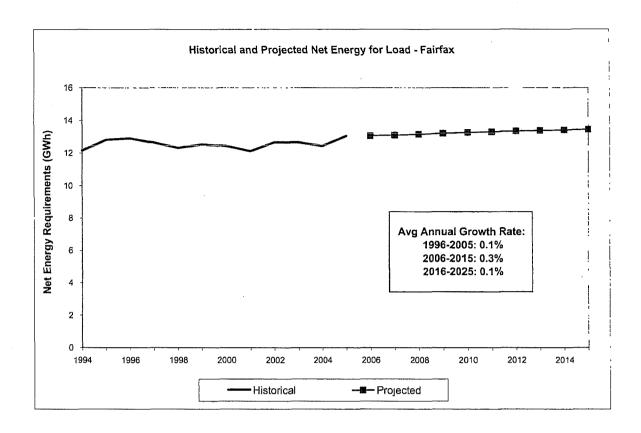
Delano Monthly Coincident-Peak Demand (MW)

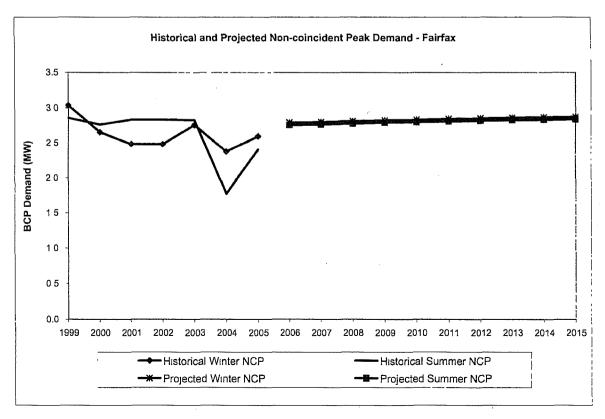
_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	87	8.3	83	79	8 9	10 4	11 5	11.4	10.7	8 1	B 7	9 1	87
	2007	91 ·	86	87	83	93	10 8	120	119	11 1	84	9 1	95	9 1
	2008	9 4	9 0	90	86	97	11 2	12 5	12 3	116	88	9 5	99	9 4
B	2009	98	93	9 4	90	101	11 7	130	128	12 0	9 1	98	102	98
벓	2010	10 1	97	97	93	104	12 1	13 4	133	12 5	94	10 1	106	101
Projected	2011	10 5	10 0	100	96	107	12 5	13 9	13 7	12 B	97	10 4	109	105
Ā.	2012	10 B	10 3	103	99	111	12 9	143	142	13 3	101	107	112	10 B
	2013	11 1	106	106	102	114	13 3	147	14 6	13 7	10 4	11 0	115	11 1
	2014	11 4	10 9	109	105	117	13 6	15 2	15 0	14 1	107	113	119	114
_	2015	117	11 2	112	107	121	14 D	15 6	15 4	14 4	109	116	12 1	117
	2016	12 0	11 5	11 5	11.0	124	14 4	15 9	158	14 8	11 2	119	124	120
	2017	12 3	117	118	113	127	14 7	163	16 2	15 1	115	122	127	123
	2018	126	12 0	12 1	11 5	130	15 1	16 7	16 5	15 5	118	12 5	130	126
ed	2019	12 9	12 3	123	118	133	15 4	17 1	169	15 9	120	127	133	129
Projected	2020	13 2	12 6	126	12 1	135	15 7	17 5	17 3	16 2	123	13 0	136	132
Ť	2021	13 5	128	129	123	13 B	16 1	179	17 7	16 6	126	133	13 9	13 5
ď.	2022	13 8	13 1	13.2	126	14 1	16 4	18 2	181	16 9	128	136	14 2	138
	2023	14 1	13 4	13.5	129	14.4	168	186	184	17 3	131	139	145	14 1
	2024	14 4	13 7	137	13 1	147	17 1	190	188	17 6	. 134	14 1	148	14 4
	2025	14 6	13 9	140	134	150	17 5	19 4	19 2	18 0	13.6	14 4	15 1	14 6

Monthly Coincidence Factors

	Year	Jan	Feb	Mar	Apr	May	Jun _	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	88 2%
	2007	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
	2008	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
ected	2009	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
큥	2010	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
Projec	2011	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97.4%	94 5%
	2012	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
	2013	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
	2014	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
	2015	94 5%	95 8%	99 2%	96 8%	98 9%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	94 5%
	2005-2015	94 5%	95 8%	99 2%	96 8%	95 8%	98 2%	94 7%	99 1%	96 8%	97 3%	98 4%	97 4%	93 9%

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Fairfax
Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	gy Requirem	ents (CY.)			Non-	Coincider	it Peak Dem	and		C
	•	Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	12,906		12,496	-	-3 2%	2.8	•	52 8%	23	-	64.1%	#N
	1997	12,649	-2 0%	12,616	1 0%	-0 3%	27	-3.7%	53.8%	23	0 1%	62.7%	#N/
	1998	12,328	-2 5%	13,212	4.7%	7 2%	29	8.9%	48 1%	28	21.3%	50.4%	#N/
ij	1999	12,543	1 7%	13,241	0.2%	5 6%	30	3 8%	47.2%	2.9	2.3%	50 1%	#N
÷	2000	12,445	-0.8%	12,761	-3.6%	2.5%	2.7	-12 5%	53.5%	2.8	-3.3%	51.4%	#N/
Historical	2001	12,126	-2 6%	12,532	-1 8%	3.3%	25	-6.4%	55.7%	2.8	2.6%	48 8%	#N
I	2002	12,674	4 5%	12,872	2 7%	1.6%	2.5	0.0%	58.2%	28	0 0%	51 1%	#N
	2003	12,671	0.0%	12,848	-0 2%	1 4%	2.8	10.9%	52 5%	28	-0 2%	51.2%	#N
	2004	12,452	-1.7%	12,909	0 5%	3 7%	24	-13 8%	59.8%	18	-37.2%	80 1%	#N
_	2005	13,063	4.9%	13,575	5 2%	3 9%	26	9 3%	57.4%	2 4	35,5%	62.0%	#N
	2006	13,068	0.0%	13,068	-3 7%		28	7.5%	53 4%	28	14 7%	54 1%	2.
	2007	13,104	0.3%	13,104	0 3%		2,8	0 3%	53 4%	28	0 3%	54.1%	2
	2008	13,164	0.5%	13,164	0.5%		28	0.5%	53 4%	28	0 5%	54.1%	2.
	2009	13,221	0 4%	13,221	0 4%		28	0 4%	53 4%	28	0 4%	54 1%	2.
	2010	13,266	0 3%	13,266	0.3%		28	0 3%	53 4%	28	0 3%	54.1%	2.
	2011	13,311	0 3%	13,311	0.3%		2.8	0 3%	53.4%	2.8	0 3%	54.1%	2
	2012	13,353	0 3%	13,353	0.3%		2.9	0 3%	53 4%	28	0 3%	54.1%	2
	2013	13,389	0 3%	13,389	0 3%		2.9	. 0 3%	53,4%	2.8	0 3%	54 1%	2
ad	2014	13,421	0.2%	13,421	0 2%		29	0 2%	53 4%	28	0.2%	54 1%	2.
Projected	2015	13,451	0 2%	13,451	0 2%		29	0.2%	53 4 <u>%</u>	28	0 2%	54 1%	2
ē	2016	13,479	0.2%	13,479	0 2%	•	29	0.2%	53 4%	2.8	0 2%	54.1%	2
a.	2017	13,509	0.2%	13,509	0.2%		2.9	0 2%	53 4%	29	0 2%	54.1%	2
	2018	13,532	0 2%	13,532	0.2%		29	0.2%	53.4%	2.9	0.2%	54 1%	2
	2019	13,548	0 1%	13,548	0 1%		2.9	0 1%	53.4%	29	0 1%	54 1%	2
	2020	13,564	0 1%	13,564	0.1%		2.9	0 1%	53 4%	29	0 1%	54 1%	2
	2021	13,577	0.1%	13,577	0.1%		29	0 1%	53 4%	2,9	0 1%	54.1%	2
	2022	13,593	0 1%	13,593	0 1%		2.9	0.1%	53 4%	29	0 1%	54.1%	2
	2023	13,610	0 1%	13,610	0 1%		29	0 1%	53 4%	29	0 1%	54.1%	2.
	2024	13,624	0 1%	13,624	0 1%		2.9	0 1%	53.4%	29	0.1%	54.1%	2
	2025	13,638	0 1%		0.1%		29	0.1%	53 4%	29	0 1%	54 1%	2
ŭ,	Thru 2005		0.1%		0.9%			-0 8%	53 9%		0 5%	57.2%	
AAGR	2006-2015		0.3%)	0 3%			0.3%	53 4%		0 3%	54.1%	
٩	2016-2025		0.1%	3	0 1%			0.1%	53 4%		0 1%	54.1%	

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Fairfax Monthly Not Energy Requirements (MWh)

_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N.
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N.
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
Ĕ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N.
Historical	2001	1,183	1,151	1,066	888	788	898	1,088	1,011	890	983	1,047	1,135	12,12
Ī	2002	1,154	1,051	1,123	939	844	905	1,219	1,055	1,029	1,124	1,089	1,141	12,67
	2003	1,288	1,213	1,134	920	821	878	1,067	1,126	972	1,056	1,022	1,165	12,67
	2004	1,241	1,133	1,075	927	915	937	1,090	956	933	967	999	1,278	12,45
_	2005	1,361	1,087	1,121	873	869	1,010	1,143	1,014	932	1,065	1,232	1,354	13,06
	2006	1,291	1,170	1,145	944	879	960	1,163	1,071	987	1,080	1,117	1,259	13,06
	2007	1,295	1,174	1,14B	946	882	963	1,167	1,074	990	1,083	1,120	1,263	13,10
	2008	1,301	1,179	1,154	950	886	967	1,172	1,079	994	1,088	1,126	1,269	13,16
5	2009	1,307	1,184	1,159	955	890	971	1,177	1,084	998	1,092	1,130	1,274	13,22
효	2010	1,311	1,188	1,163	958	893	975	1,181	1,088	1,002	1,096	1,134	1,279	13,26
Projected	2011	1,315	1,192	1,167	961	896	978	1,185	1,091	1,005	1,100	1,138	1,283	13,31
ď.	2012	1,320	1,196	1,170	964	898	981	1,189	1,095	1,008	1,103	1,142	1,287	13,35
	2013	1,323	1,199	1,173	967	901	984	1,192	1,09B	1,011	1,106	1,145	1,290	13,38
	2014	1,326	1,202	1,176	969	903	986	1,195	1,100	1,014	1,109	1,148	1,294	13,42
_	2015	1,329	1,205	1,179	971	905	988	1,197	1,103	1,016	1,111	1,150	1,296	13 45
	2016	1,332	1,207	1,181	973	907	990	1,200	1,105	1,018	1,113	1,152	1,299	13,47
	2017	1,335	1,210	1,184	975	909	992	1,203	1,108	1,020	1,116	1,155	1,302	13,50
	2018	1,337	1,212	1,186	977	911	994	1,205	1,109	1,022	1,118	1,157	1,304	13,53
70	2019	1,339	1,213	1,187	978	912	995	1,206	1,111	1,023	1,119	1,158	1,306	13,54
Ď	2020	1,340	1,215	1,189	979	913	997	1,207	1,112	1,024	1,121	1,160	1,307	13,56
Projected	2021	1,342	1,216	1,190	980	914	998	1,209	1,113	1,025	1,122	1,161	1,308	13,57
<u>a</u>	2022	1,343	1,217	1,191	981	915	999	1,210	1,114	1,026	1,123	1,162	1,310	13,59
	2023	1,345	1,219	1,193	983	916	1,000	1,212	1,116	1,028	1,124	1,164	1,312	13,61
	2024	1,346	1,220	1,194	984	917	1,001	1,213	1,117	1,029	1,125	1,165	1,313	13.62
	2025	1,348	1,221	1,195	985	918	1,002	1,214	1,118	1,030	1,127	1,166	1,314	13.63
			,											

Monthly Energy Allocation Factors

	Year	Jan	Fcb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct _	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	. #N/A	#N/A	#N/A	#N
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	INIA	#N/A	#N/A	#N/A	∦N/A	#N
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
뜛	2001	9 8%	9 5%	8 8%	7 3%	6 5%	7 4%	9 0%	8 3%	7 3%	B 1%	8 6%	9 4%	100 0
至	2002	9 1%	8 3%	8 9%	7 4%	6 7%	7 1%	9 6%	8 3%	8 1%	8 9%	86%	90%	100 0
	2003	10 2%	96%	8 9%	7 3%	6 5%	69%	8 4%	8 9%	77%	8 4%	81%	92%	100 0
	2004	10 0%	9 1%	8 6%	7 4%	7 3%	7 5%	88%	77%	7 5%	7 8%	B 0%	10 3%	100 0
	2005	10 4%	8 3%	8 6%	67%	67%	7 7%	8 7%	7 8%	7 1%	8 2%	9 4%	10.4%	100 0
	2006	9 9%	9 0%	88%	7 2%	6 7%	7 3%	8 9%	8 2%	7 5%	8 3%	86%	96%	100 0
	2007	9 9%	9 0%	B 8%	7 2%	6 7%	7 3%	89%	8 2%	7 6%	8 3%	86%	96%	100 0
	2008	9 9%	9 0%	8 8%	7 2%	67%	7 3%	8 9%	8 2%	7 6%	8 3%	86%	96%	100 0
E -	2009	9 9%	90%	8 8%	7 2%	8 7%	7 3%	8 9%	8 2%	7 6%	8 3%	86%	96%	100 0
Projected	2010	9 9%	90%	8 8%	7 2%	67%	7 3%	8 9%	8 2%	7 6%	8 3%	86%	96%	100 0
ē	2011	9 9%	9 0%	88%	7 2%	6 7%	7 3%	8 9%	8 2%	7 6%	8 3%	86%	96%	100 0
Δ.	2012	9 9%	9 0%	88%	7 2%	67%	7 3%	8 9%	8 2%	7 6%	8 3%	8 6%	96%	100 0
	2013	9 9%	9 0%	₽8%	7 2%	67%	7 3%	8 9%	8 2%	7 6%	8 3%	8 6%	96%	100 0
	2014	9 9%	9 0%	8 8%	7 2%	67%	7 3%	8 9%	8 2%	7 6%	8 3%	8 6%	96%	100 0
	2015	9 9%	9 0%	8 8%	7 2%	6 7%	7 3%	8 9%	8 2%	7 6%	8 3%	8 6%	96%	100 0
Ė	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
₹	2006-2015	9 9%	9 0%	8 8%	7 2%	67%	7 3%	8 9%	8 2%	7 6%	8 3%	8 6%	96%	100 0

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Fairfax Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996	#N/A												
	1997	#N/A	AIN#	#N/A										
	1998	#N/A	#NIA	#N/A	#N/A	#N/A	#N/A							
77	1999	#N/A												
Historical	2000	#N/A												
ş	2001	23	25	2 1	18	19	24	27	28	22	22	25	23	#N/A
王	2002	24	24	22	22	20	25	28	2 5	26	22	23	25	2.5
	2003	28	27	25	22	19	2.5	27	28	22	22	23	24	28
	2004	17	17	15	13	15	18	18	18	17	14	16	17	24
	2005	26	22	21	17	18	2 4	2 4	2 4	2 1	_ 19	2.5	2 4	26
	2006	28	26	20	19	21	2 5	28	27	23	2 2	24	24	28
	2007	28	26	21	19	21	25	2 B	27	24	22	24	2 4	28
	2008	28	26	2 1	19	2 1	26	28	27	24	22	24	24	28
9	2009	28	26	2 1	19	2 1	26	28	27	24	22	24	24	28
Projected	2010	28	27	2 1	19	2 1	26	28	27	2 4	22	24	24	28
ō	2011	28	27	2 1	20	21	26	28	27	24	22	24	24	2.8
ñ.	2012	29	27	21	7.0	21	26	2 B	27	24	23	24	24	29
	2013	29	27	2 1	20	21	26	28	27	24	23	24	24	29
	2014	29	27	2 1	20	21	26	28	27	24	23	2 4	24	29
	2015	29	27	2 1	20	21	26	28	27	2 4	23	24	24	2 9
	2016	2 9	27	2 1	20	21	26	28	27	2 4	23	25	2.5	29
	2017	29	27	21	20	21	26	29	28	24	23	25	25	29
	2018	29	27	2 1	20	2 1	26	29	28	24	23	25	25	29
20	2019	29	27	21	20	21	26	29	28	24	23	25	2.5	29
ä	2020	29	27	21	20	2 1	26	29	28	24	23	25	2.5	29
Projected	2021	29	2,7	21	20	2 1	26	29	28	24	23	25	25	29
Ē.	2022	29	27	21	20	21	26	29	28	24	23	25	25	29
	2023	29	27	21	20	2 1	26	29	28	2 4	23	25	2 5	29
	2024	29	27	2 1	20	21	26	29	28	2 4	23	25	25	29
	2025	29	27	21	20	21	26	29	28	2.5	2 3	25	2 5	29

Monthly Load Factors

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996													
	1997													
	1998													
Ti.	1999													
녙	2000													
Historical	2001	68 7%	68 9%	68 0%	67 1%	56 5%	51 2%	53 6%	47 9%	56 8%	60 2%	58 5%	67 8%	
Ī	2002	64 3%	64 5%	68 3%	58 2%	56 1%	51 2%	57 8%	57 8%	54 5%	69 0%	65 2%	62 5%	58 2%
	2003	62 8%	67 8%	61 4%	58 2%	59 5%	49 2%	53 9%	53 5%	60 8%	63 9%	62.8%	65 9%	52 5%
	2004	99 0%	96 6%	95 2%	98 3%	81 5%	73 3%	82.6%	727%	77 6%	93 9%	87 7%	101 9%	59 8%
	2005	70.4%	73 3%	70 5%	70 2%	66 0%	58 3%	64 2%	56 8%	60 9%	74 2%	69 3%	74 7%	57 4%
	2006	62 2%	66 7%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	50 4%	65 8%	65 2%	71 1%	53 4%
	2007-	62 2%	66 7%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 0%	70 9%	53 4%
	2008	62 2%	64 4%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 1%	71 0%	53 4%
ם	2009	62 2%	66 7%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 1%	71 D%	53 4%
ğ	2010	62 2%	66 7%	75 2%	68 4%	57 5%	52 6%	56 7%	64 1%	58 4%	65 8%	65 1%	71 0%	53 4%
Projected	2011	62 2%	66 7%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 1%	71 0%	53 4%
ď.	2012	62 2%	64 4%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 2%	71 1%	53 4%
	2013	62 2%	867%	75 2%	6B 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 2%	71 1%	53 4%
	2014	62 2%	66 7%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 2%	71 1%	53 4%
	2015	62 2%	667%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 2%	71 1%	53 4%
Avg.	1996-2005	73 0%	74 2%	72.7%	70 4%	63 9%	56 6%	62 4% .	57.7%	62 1%	72.2%	68 7%	74 6%	57 0%
₹	2006-2015	62 2%	66 2%	75 2%	68 4%	57 5%	52 6%	56 7%	54 1%	58 4%	65 8%	65 1%	71 1%	53 4%

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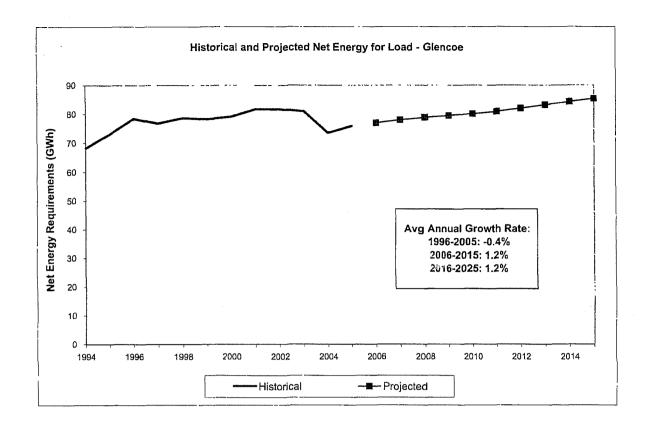
Fairfax Monthly Coincident-Peak Demand (MW)

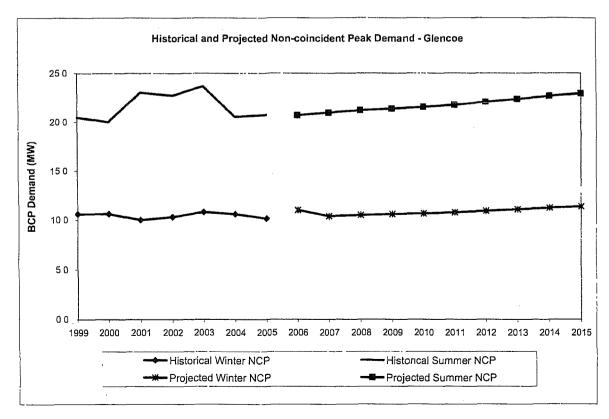
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	27	25	19	18	20	24	26	26	23	20	23	23	27
	2007	27	25	19	18	20	24	26	26	23	21	23	23	27
	2008	27	25	. 20	18	20	24	26	26	23	21	23	23	27
'n	2009	27	25	20	18	20	2 4	26	26	23	21	23	23.	27
ŧ	2010	27	25	20	19	20	2 4	26	26	23	21	23	23	27
Projected	2011	27	25	20	19	20	24	26	. 26	23	21	23	23	27
₫.	2012	27	25	20	19	20	2 4	27	26	23	21	23	24	27
	2013	27	25	20	19	20	24	27	26	23	21	23	24	27
	2014	27	25	20	19	20	2 4	27	26	23	21	23	24	27
	2015	27	25	20	19	20	24	27	26	23	21	24	24	27
	2016	27	25	20	19	20	24	27	26	23	21	2 4	24	27
	2017	28	25	20	19	20	2 4	27	26	23	21	24	24	28
	2018	28	26	20	19	20	2 5	27	27	23	21	24	24	28
20	2019	28	26	20	19	2 1	25	27	27	23	21	24	24	28
ซู้	2020	28	26	20	19	21	25	27	27	23	21	24	24	2 B
Projected	2021	28	26	20	19	21	25	27	27	24	21	24	24	28
	2022	2 B	26	20	19	21	2 5	27	27	2 4	21	24	24	28
	2023	28	26	20	19	21	25	27	27	24	21	24	24	28
	2024	28	26	20	19	21	25	27	27	24	21	24	24	28
	2025	2.8	26	20	19	21	2.5	27	27	24	21	24	24	28

Monthly Coincidence Factors

	<u>Year</u>	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Ost	Nov	Dec	Wntr Pk
	2006	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
	2007	95 4%	94 4%	94 8%	95 4%	96 3%	. 93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
	2008	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
멅	2009	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
Jecte	2010	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
. 📅	2011	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
Œ	2012	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
	2013	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
	2014	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
	2015	95 4%	94 4%	94 8%	95 4%	96 3%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%
	2006-2015	95 4%	94 4%	94 8%	95 4%	94 4%	93 4%	94 2%	96 3%	96 4%	93 0%	96 1%	96 8%	95 4%

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Glencoe
Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	gy Requireme	ents (CY)			Non-	Coincider	nt Peak Dem	and		
	•	Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
_	1996	78,461	-	77,720	-	-0.9%	10 1	-	88.3%	20.2		44.4%	#N/
	1997	76,879	-2.0%	77,395	-0 4%	0.7%	10 6	4 5%	82.8%	193	-4.4%	45.5%	#N/
	1998	78,725	2 4%	81,454	5 2%	3.5%	10 6	0.0%	84.8%	20.9	8.3%	43 0%	#N/
ā	1999	78,364	-0 5%	80,324	-1 4%	2.5%	10 6	0.0%	84.4%	20.5	-1.9%	43 6%	#N/
Historica	2000	79,143	1 0%	80,246	-0 1%	1 4%	10 6	0.1%	85 1%	20.0	-2 3%	45.1%	#N/
stc	2001	81,751	3 3%	81,613	17%	-0 2%	10 0	-5.8%	93 3%	23.1	15.1%	40.5%	#N/
I	2002	81,781	0 0%	80,353	-1 5%	-1.7%	10 3	3 0%	90 7%	22.7	-1 4%	41.1%	#N/
	2003	81,066	-0 9%	80,371	0 0%	-0.9%	10 8	4 8%	85 7%	23 7	4 2%	39.1%	#N/
	2004	73,561	-9 3%	75,926	-5 5%	3 2%	10.6	-1 9%	79 3%	20,5	-13 3%	40.9%	#N/
	2005	75,995	3 3%	75,555	-0 5%	-0 6%	10 1	-4 3%	85 6%	20 7	1 0%	41.8%	#N/
	2006	77,016	1 3%	77,016	1 9%		11.0	8 3%	80 1%	20 7	-0 2%	42.5%	9 (
	2007	78,047	1.3%	78,047	1.3%		10 4	-5 6%	85.9%	21 0	1 3%	42 5%	9 !
	2008	78,863	1 0%	78,863	1 0%		10.5	1.0%	85 9%	21 2	1 0%	42 5%	10.0
	2009	79,523	0.8%	79,523	0.8%	•	10 6	0.8%	85.9%	21 4	0.8%	42 5%	10.
	2010	80,154	0.8%	80,154	0 8%		10 6	0.8%	85.9%	21 6	0.8%	42 5%	10.2
	2011	80,944	1.0%	80,944	1 0%		108	1.0%	85.9%	21.8	1 0%	42.5%	10:
	2012	82,081	1 4%	82,081	1 4%		10 9	1.4%	85 9%	22.1	1.4%	42 5%	10 4
	2013	83,230	1 4%	83,230	14%		11.1	1.4%	85 9%	22.4	1.4%	42 5%	10 (
ď	2014	84,361	1 4%	84,361	14%		11 2	1.4%	85 9%	22.7	1 4%	42 5%	10
Projected	2015	85,404	1 2%	85,404	1.2%		11 3	1 2%	85 9%	23.0	1 2%	42.5%	10 8
ĕ	2016	86,439	1 2%	86,439	1 2%		11.5	1 2%	85 9%	23 2	1 2%	42.5%	11 (
₫.	2017	87,426	1 1%	87,426	1.1%		11 6	1.1%	85 9%	23 5	1 1%	42.5%	11 1
	2018	88,405	1 1%	88,405	11%		11.7	11%	85 9%	23.8	1 1%	42 5%	11.3
	2019	89,425	1.2%	89,425	1 2%		11.9	1 2%	85 9%	24.0	1 2%	42 5%	11.4
	2020	90,456	1 2%	90,456	1 2%		12 0	1 2%	85 9%	24 3	1.2%	42 5%	11.5
	2021	91,519	1.2%	91,519	1 2%		122	1 2%	85 9%	24 6	1 2%	42 5%	11.6
	2022	92,614	1 2%	92,614	1 2%		123	1 2%	85 9%	24 9	1 2%	42 5%	11 8
	2023	93,701	1.2%	93,701	1 2%		12 4	1.2%	85 9%	25.2	1.2%	42 5%	11 9
	2024	94,779	1.2%	94,779	1 2%		12.6	1 2%	85.9%	25.5	1.2%	42 5%	12 (
	2025	95,848	1.1%	95,848	11%		12.7	1 1%	85 9%	25 8	1.1%	42 5%	12 2
<u>نڌ</u> .	Thru 2005		-0 4%		-0 3%			0.0%	86 0%		0 3%	42 5%	.,_,
AAGR	2006-2015	4	1.2%	ı	1 2%			0.4%	85 3%		1 2%	42 5%	
⋖	2016-2025		1 2%	,	1.2%			1 2%	85 9%		1 2%	42.5%	

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Glencoe Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Tola
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1						
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	##						
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1						
R	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	44						
Ĕ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	, #N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
Histoncal	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	4#						
至	2002	5,812	5,189	5,692	5,309	5,335	7,115	9,327	11,077	10,154	5,450	5,411	5,909	81,7
	2003	6,038	5,385	5,564	5,140	5,276	6,882	9,664	11,662	8,873	5,778	5,124	5,681	81,0
	2004	5,857	5,276	5,442	5,066	5,104	5,809	7,787	7,846	9,071	5,849	4,940	5,513	73,5
_	2005	5,603	4,819	5 150	4,692	4,839	6,596	8,227	10,519	9,765	5,062	5,016	5,705	75,9
	2006	5,755	5,103	5,391	4,986	5,071	6,501	8,614	10,097	9,346	5,469	5,055	5,629	77,0
	2007	5,832	5,171	5,463	5,052	5,139	6,588	8,729	10,232	9,472	5,542	5,122	5,704	78,0
	2008	5,893	5,225	5,520	5,105	5,193	6,657	8,820	10,339	9,571	5,600	5,176	5,764	78,8
9	2009	5,943	5,269	5,566	5,148	5,236	6,713	8,894	10,425	9,651	5,847	5,219	5,812	79,5
Projected	2010	5,990	5,311	5,611	5,189	5,278	6,766	8,965	10,508	9,727	5,692	5,261	5,858	80,1
충	2011	6,049	5,363	5,666	5,240	5,330	6,833	9,053	10,611	9,823	5,748	5,313	5,916	80,9
ñ.	2012	6,134	5,438	5,745	5,313	5,405	5,929	9,180	10,761	9,961	5,829	5,387	5,999	82,0
	2013	6,220	5,514	5,826	5,388	5,480	7,026	9,309	10,911	10,100	5,910	5,463	6,083	83,2
	2014	6,304	5,589	5,905	5,461	5,555	7,121	9,435	11,059	10,238	5,990	5,537	6,166	84,3
	2015	6,382	5,659	5,978	5,529	5,624	7,209	9,552	11,196	10,364	6,065	5,605	6,242	85,4
	2016	6,460	5,727	6,050	5,596	5,692	7,296	9,668	11,332	10,490	6,138	5,673	6,318	86,4
	2017	6,533	5,792	6,120	5,659	5,757	7,380	9,778	11,461	10,610	6,208	5,738	6,390	87,4
	2018	6,606	5,857	6,188	5,723	5,821	7,462	9,888	11,590	10,729	6,278	5,802	6,461	88,4
2	2019	6,683	5,925	6,259	5,789	5,888	7,548	10,002	11,723	10,852	6,350	5,869	6,536	89,4
Projected	2020	6,760	5,993	6,332	5,856	5,956	7,636	10,117	11,859	10,977	6,423	5,937	6,811	90,4
<u>ē</u> ,	2021	6,839	6,064	6,406	5,924	6,026	7,725	10,236	11,998	11,106	6,499	6,007	6,689	91,5
₫.	2022	6,921	6,136	6,483	5,995	6,098	7,818	10,358	12,141	11,239	6,577	6,078	6,769	92,6
	2023	7,002	6,208	6,559	6,066	6,170	7,909	10,480	12,284	11,371	6,654	6,150	6,848	93,7
	2024	7,083	6,280	6,634	6,135	6,241	8,000	10,600	12,425	11,502	6,730	6,221	6,927	94,7
	2025	7,163	6,350	6,709	6,205	6,311	8,091	10,720	12,565	11,632	6,806	6,291	7,005	95,8
													,,,,,,	

Monthly Energy Allocation Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1/N/A	#N/A	#N/A	#N
77	1999	#N/A	#N/A	#N/A	#N/A	#/N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
差	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1/N/A	#N
Historical	2001	#N/A	-#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
포	2002	7 1%	63%	7 0%	6 5%	6 5%	87%	11 4%	13 5%	12 4%	6.7%	6 6%	7 2%	100 0
	2003	7 4%	66%	6 9%	63%	6 5%	8 5%	11 9%	14 4%	10 9%	7 1%	6 3%	7 0%	100 0
	2004	8 0%	7 2%	7 4%	69%	6 9%	7 9%	10 6%	10.7%	12 3%	8 0%	67%	7 5%	100 0
	2005	7 4%	6 3%	6 8%	6 2%	6 4%	87%	10 8%	13 8%	12 8%	67%	6 6%	7 5%	100 d
	2006	7 5%	66%	7 0%	6 5%	6 6%	8 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
	2007	7 5%	6 6%	7 0%	6 5%	6 6%	8 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 C
	2008	7 5%	66%	7 0%	6 5%	6 6%	84%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
Έ	2009	7 5%	66%	7 0%	6 5%	6 6%	B 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
Projected	2010	7 5%	66%	7 0%	6 5%	6 6%	8 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
Ğ	2011	7 5%	6 6%	7 0%	6 5%	6 6%	B 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
<u>~</u>	2012	7 5%	66%	7 0%	6 5%	6 6%	84%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
	2013	7 5%	66%	7 0%	6 5%	6 6%	8 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
	2014	7 5%	66%	7 0%	6 5%	6 6%	8 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
	2015	7 5%	6.6%	7 0%	6 5%	6 6%	8 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0
Avg.	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
₹	2006-2015	7 5%	6 6%	7 0%	6 5%	6 6%	B 4%	11 2%	13 1%	12 1%	7 1%	6 6%	7 3%	100 0

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		V2											ŀ										l									
																							115									
																							116									
													1										110									
		Oct	#N/A	#N/A	#N/A	#N/A	#N/A	18	66	138	14.7	107	11 B	120	12.2	123	12.4	12.5	126	128	130	13.2	13.3	135	136	138	13.9	141	143	14 4	146	14 R
	ud (MW)	Sep	#NIA	#N/A	#N/A	#N/A	#N/A	19.5	22 3	202	19.8	193	181	183	185	187	188	19.0	193	19 5	198	20 D	203	20 2	20 7	210	212	215	217	22 0	22 2	22.5
	aak Dema	Aug	#N/A	#N/A	#N/A	#N/A	#N/A	23 1	208	23 7	17 9	20 7	193	196	198	19.9	20 1	203	206	209	212	21 4	217	21 9	22 2	22 4	22.7	22 9	23 2	23 5	23 8	24.0
Glencoe	ıcldent Pı	Jul	#WA	#N/A	#N/A	#N/A	#N/A	20 2	22.7	196	20 5	18 2	20.7	210	212	214	216	218	22 1	22 4	22.7	23 0	23 2	23 2	23 B	24 0	243	246	24 9	25 2	25 5	75.8
	Monthly Non-Coincident Peak Demand (MW)																						17.7									
	Monthly											i											10.4									
																							0 01									
		Маг	#N/A	#N/A	#N/A	#N/A:	#N/A	#N/A	9 6	100	9 8	9.0	9.4	6	9 6	9.7	9 6	8 8	10 0	101	103	104	10.5	106	108	1 0	110	11.1	113	114	115	117
																							111									
		Jan	HNIA	#W/A	#N/A	#N/A :	#N/A	#N/A	101	10 4	105	101	101	102	103	104	10.5	106	107	109	110	112	113	-	116	117	118	120	121	123	124	12.5
		Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2005	2002	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025

Projected

Projected

34/2

Year 1995 1997

Monthly Load Factors

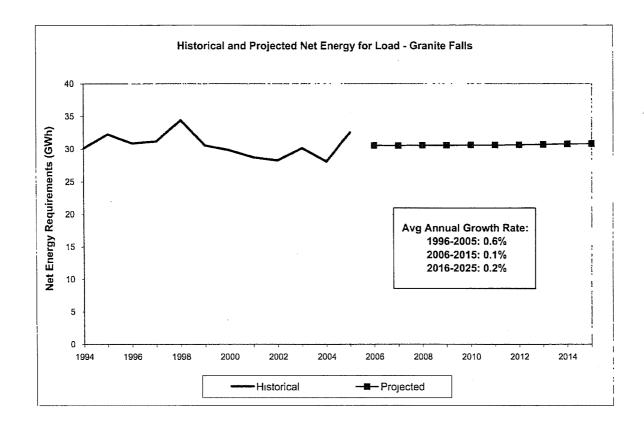
Glencoe Monthly Coincident-Peak Demand (MW)

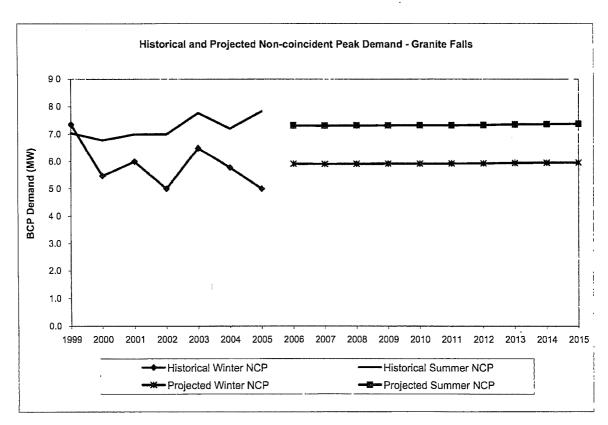
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
-	2006	9.8	96	90	87	90	15 7	20 1	19 0	180	11 2	95	10 2	98
	2007	99	97	92	88	91	15 9	20 4	19 2	18 2	113	96	10.3	99
	2008	10 0	98	93	8 9	92	16 0	20 6	19 4	18 4	11 4	97	10 4	10 0
'n	2009	10 1	99	93	90	93	16 2	20 7	196	18 6	115	98	10 5	101
ם	2010	10 2	10 0	94	9 1	94	163	20 9	19 7	18 7	116	99	10 6	102
Projected	2011	103	101	95	92	95	16 5	21 1	199	18 9	117	100	10 7	103
ñ.	2012	10 4	10 Z	96	93	96	16 7	21 4	20 2	19 2	119	10 1	10 9	104
	2013	10 6	104	98	94	97	16 9	21 7	20 5 -	19 4	12 1	103	11 0	106
	2014	10 7	105	99	95	99	17 2	22 0	20 B	19 7	122	10 4	11.2	107
	2015	10.8	106	100	97	100	17 4	22 3	21 0	20 0	12 4	10.5	11 3	108
	2016	11 0	108	10 1	98	10 1	17 6	22 5	21 3	20 2	125	106	114	11 0
	2017	11 1	109	103	99	10 2	17 B	228	21 5	20 4	127	108	116	11 1
	2018	11 2	110	10 4	100	10 4	180	23 1	218	20 7	128	10 9	11 7	11 2
20	2019	11 4	11 1	105	101	10 5	18 2	23 3	22 0	20 9	13 0	110	11 8	114
Projected	2020	115	113	106	102	106	18 4	23 6	22 3	21 1	13 1	11 1	12 0	115
*	2021	116	114	107	104	107	186	23 9	22 5	21 4	133	113	12 1	116
ă.	2022	11 8	115	109	10 5	108	188	24 2	22 8	216	13 4	114	12 2	118
	2023	11 9	11.7	110	10 6	110	191	24 4	23 1	219	136	115	12.4	119
	2024	120	118	11 1	107	11 1	193	24 7	23 3	22 1	137	117	12 5	12 0
	2025	12 2	119	11 2	10.8	11 2	19 5	25 0	23 6	22 4	13.9	118	12 7	122

Monthly Coincidence Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	89 1%
	2007	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
	2008	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
Ġ	2009	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
ŧ	2010	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
ᇂ	2011	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 5%	94 0%	97 1%	98 4%	95 6%
ā.	2012	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
	2013	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 D%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
	2014	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	95 6%
	2015	97 1%	97 0%	96 4%	97 5%	97 7%	99 1%	97 0%	98 1%	99.6%	94 0%	97 1%	98 4%	95 6%
	2006-2015	97 1%	97 0%	96 4%	97 5%	97 0%	99 1%	97 0%	98 1%	99 6%	94 0%	97 1%	98 4%	94 9%

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Granite Falls
Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	gy Requireme	ents (CY)			Non-	Coinciden	t Peak Dem	and		c
		Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	30,883	-	30,814	•	-0 2%	5.7	•	61.9%	6.4	*	55 3%	#N/
	1997	31,169	0 9%	31,370	1 8%	0.6%	' 56	-2 0%	63.7%	6.8	6 2%	52 6%	#N/.
	1998	34,448	10.5%	35,038	11.7%	1.7%	7 4	31.8%	53 4%	78	14 7%	50 7%	#N/
ä	1999	30,582	-11 2%	30,937	-11.7%	1,2%	7.4	0 0%	47 4%	7 0	-9 3%	49 6%	#N/.
Ϋ́	2000	29,868	-2 3%	30,092	-2 7%	08%	5.5	-25.7%	62 3%	6 8	-3.6%	50.3%	#N/.
Historical	2001	28,741	-3.8%	28,518	-5 2%	-0 8%	6.0	9 6%	54.7%	7 0	3.2%	46 9%	#N/.
I	2002	28,294	-1.6%	27,774	-2.6%	-18%	50	-16 7%	64 6%	70	0.0%	46 1%	#N/.
	2003	30,162	6.6%	29,854	7.5%	-1 0%	6.5	30 0%	53 0%	78	11 0%	44 3%	#N/.
	2004	28,107	-6 8%	28,708	-3 8%	21%	58	-11.1%	55.5%	7 2	-7 2%	44 5%	#N/.
_	2005	32,560	15 8%	32,156	12 0%	-1 2%	5.0	-13 5%	74 3%	7.8	8 6%	47.5%	#N/.
	2006	30,579	-6 1%	30,579	-4 9%		5.9	18.3%	59 0%	7.3	-6 5%	47.7%	5.8
	2007	30,560	-0.1%	30,560	-0 1%		5.9	-0.1%	59.0%	73	-0.1%	47 7%	57
	2008	30,597	0.1%	30,597	0.1%		59	0.1%	59 0%	7 3	0 1%	47 7%	5 8
	2009	30,601	0 0%	30,601	0.0%		59	0.0%	59.0%	7.3	0 0%	47 7%	5 E
	2010	30,624	0 1%	30,624	0 1%		5,9	0.1%	59 0%	73	0 1%	47 7%	5.8
	2011	30,628	0 0%	•	0 0%		5.9	0 0%	59 0%	73	0.0%	47.7%	5.8
	2012	30,674	0.1%	30,674	0 1%		59	01%	59.0%	73	0 1%	47 7%	5 E
	2013	30,741	0.2%	30,741	0 2%		59	0 2%	59 0%	7.4	0 2%	47.7%	5,8
eq	2014	30,804	0.2%	30,804	0.2%		60	0.2%	59.0%	7.4	0 2%	47 7%	5 8
Projected	2015	30,849	0 1%	30,849	0.1%		60	0.1%	59.0%	7.4	01%	47.7%	5.8
ē	2016	30,893	0.1%	30,893	0 1%		6.0	0 1%	59.0%	7 4	0 1%	47 7%	5 8
о.	2017	30,938	0.1%	30,938	0 1%		6 0	0.1%	59.0%	7 4	0 1%	47 7%	5 8
	2018	30,987	0.2%	30,987	0.2%		6.0	0 2%	59.0%	7.4	0 2%	47 7%	5 8
	2019	31,044	0 2%		0 2%		60	0.2%	59 0%	7 4	0.2%	47.7%	58
	2020	31,110	0.2%	31,110	0 2%		60	0 2%	59 0%	74	0.2%	47.7%	5 9
	2021	31,181	0 2%	31,181	0 2%		60	0.2%	59 0%	7 5	0.2%	47 7%	5 9
	2022	31,255	0 2%	31,255	0.2%		60	0.2%	59 0%	7.5	0 2%	47.7%	5.9
	2023	31,333	0.3%	31,333	03%		6.1	0.3%	59 0%	.7 5	0 3%	47 7%	5 9
	2024	31,411	0.2%	31,411	0.2%		6 1	0 2%	59 0%	7 5	0 2%	47.7%	` 59
_	2025	31,493	0 3%	31,493	0 3%		6.1	0 3%	59.0%	7.5	0.3%	47 7%	5 9
œ	Thru 2005		0 6%	1	0.5%			-1.4%	59 1%		2.3%	48 8%	
AAGR	2006-2015		0.1%		01%			0 1%	59 0%		0 1%	47.7%	
⋖	2016-2025		0.2%	I	0 2%			0 2%	59.0%		0.2%	47.7%	

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Granite Falls Monthly Net Energy Requirements (MWh)

_	Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dac	CY Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NIA
	1997	#N/A	#N/A	#N/A	AIN#	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	∜N/A	#N/A	#N/#
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
75	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	. #N/A	#N/A	#N/A
Έ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	. #N/A
莹	2002	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/ <i>P</i>
	2003	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NIA
	2004	2,672	2,403	2,357	1,195	1,923	2,339	2,324	2,143	1,848	3,172	3,248	2,483	28,107
	2005	2,335	1,757	3,085	2,531	2,761	2,982	3,468	3,029	2,645	2,415	2,457	3,095	32,560
•	2006	2,550	2,132	2,731	1,838	2,343	2,673	2,893	2,588	2,247	2,859	2,921	2,804	30,579
	2007	2,548	2,131	2,729	1,837	2,341	2,671	2,891	2,587	2,246	2,858	2,919	2,803	30,560
	2008	2,551	2,133	2,732	1,839	2,344	2,674	2,894	2,590	2,249	2,861	2,922	2,806	30,597
70	2009	2,552	2,134	2,733	1,840	2,344	2,674	2,895	2,590	2,249	2,862	2,923	2,806	30,601
Projected	2010	2,554	2,135	2,735	1,841	2,346	2,676	2,897	2,592	2,251	2,864	2,925	2,808	30,624
충	2011	2,554	2,136	2,735	1,841	2,346	2,677	2,897	2,592	2,251	2,864	2,925	2,809	30,628
ę.	2012	2,558	2,139	2,739	1,844	2,350	2,681	2,902	2,596	2,254	2,868	2,930	2,813	30,674
	2013	2,564	2,144	2,745	1,848	2,355	2,687	2,908	2,602	2,259	2,875	2,936	2,819	30,741
	2014	2,569	2,148	2,751	1,852	2,360	2,692	2,914	2,607	2,264	2,881	2,942	2,825	30,804
	2015	2,573	2,151	2,755	1,855	2,363	2,696	2,918	2,611	2,267	2,885	2,946	2,829	30,849
	2016	2,576	2,154	2,759	1,857	2,367	r2,700	2,922	2,615	2,270	2,889	2,951	2,833	30,893
	2017	2,580	2,157	2,763	1,860	2,370	2,704	2,927	2,619	2,274	2,893	2,955	2,837	30,938
	2018	2,584	2,161	2,767	1,863	2,374	2,708	2,931	2,623	2,277	2,898	2,960	2,842	30,987
핓	2019	2,589	2,165	2,772	1,866	2,378	2,713	2,937	2,628	2,281	2,903	2,965	2,847	31,044
Projected	2020	2,594	2,169	2,778	1,870	2,383	2,719	2,943	2,633	2,286	2,909	2,971	2,853	31,110
픙	2021	2,600	2,174	2,784	1,874	2,389	2,725	2,949	2,639	2,291	2,916	2,978	2,859	31,181
Ē.	2022	2,606	2,179	2,791	1,879	2,394	2,732	2,956	2,645	2,297	2,923	2,985	2,866	31,255
	2023	2,613	2,185	2,798	1,884	2,400	2,738	2,964	2,652	2,303	2,930	2,993	2,873	31,333
	2024	2,619	2,190	2,805	1,888	2,406	2,745	2,971	2,659	2,308	2,937	3,000	2,681	31,411
	2025	2,626	2,196	2,812	1,893	2,413	2,752	2,979	2,665	2,314	2,945	3,008	2,888	31,493

Monthly Energy Allocation Factors

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	VaV	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1998	#N/A	AINI	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ē	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
悬	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	HNIA
ž	2002	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/ <i>F</i>
	2003	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
	2004	9 5%	8 5%	8 4%	4 2%	68%	8 3%	8 3%	7 6%	6 6%	11 3%	11 6%	8 8%	100 0%
	2005	7 2%	5 4%	9 5%	7 8%	8 5%	9 2% .	10.7%	9 3%	B 1%	7 4%	7 5%	9 5%	100 0%
	2006	8 3%	7 0%	8 9%	6 0%	77%	87%	9 5%	8 5%	7 3%	9 4%	96%	9 2%	100 0%
	2007	8 3%	7 0%	8 9%	6 0%	77%	87%	9 5%	8 5%	7 3%	9 4%	96%	9 2%	100 0%
	2008	8 3%	7 0%	89%	6 0%	77%	8 7%	9 5%	8 5%	7 3%	9 4%	9 6%	9 2%	100 0%
Ä	2009	8 3%	7 0%	8 9%	6 0%	77%	87%	9 5%	8 5%	7 3%	9 4%	98%	9 2%	100 0%
Projected	2010	8 3%	7 0%	8 9%	6 0%	77%	8 7%	9 5%	. 85%	7 3%	9 4%	9 6%	9 2%	100 0%
픙	2011	8 3%	7 0%	89%	6 O%	7 7%	8 7%	9 5%	8 5%	7 3%	9 4%	9 6%	92%	100 0%
à.	2012	8 3%	7 0%	8 9%	. 60%	77%	87%	9 5%	8 5%	7 3%	9 4%	9 6%	9 2%	100 0%
	2013	8 3%	7 D%	8 9%	6 0%	77%	87%	9 5%	8 5%	7 3%	9 4%	9 6%	9 2%	100 0%
	2014	8 3%	70%	8 9%	6 0%	77%	87%	9 5%	8 5%	7 3%	9 4%	9 6%	9 2%	100 0%
	2015	8 3%	7 0%	8 9%	6 0%	77%	87%	9 5%	8 5%	7 3%	9 4%	9 6%	9 2%	100 0%
, in	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
Avg	2006-2015	8 3%	7 0%	8 9%	6 0%	77%	8 7%	9 5%	8 5%	7 3%	9 4%	9 6%	9 2%	100 0%

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Granite Falls Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Маг	_Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
-	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1998	#N/A	#N/A	#N/A	∦N/A	#N/A .	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
'e	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
돲	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ĩ	2002	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	HNIA	#NIA	AW#	#N/A	#N/A
	2003	5 1	6.5	49	52	49	49	6 1	7 B	63	67	58	50	65
	2004	45	54	48	77	52	67	67	63	7 2	67	50	50	58
	2005	4 5	50	48	45	4.6	78	78	76	6.0	46	53	56	50
_	2006	59	57	53	46	5 2	68	73	64	5 9	4 9	50	5 5	59
	2007	59	57	53	46	52	68	73	64	59	49	50	55	59
	2008	59	57	53	46	5 2	68	73	64	59	4 9	50	55	5 9
Ţ,	2009	59	57	53	46	52	68	73	64	59	49	50	55	59
Projected	2010	59	57	53	46	52	68	73	64	59	50	50	55	59
음	2011	59	57	53	46	52	68	73	64	59	50	50	55	59
ā.	2012	59	. 57	53	46	5 2	6.8	73	65	59	50	50	55	59
	2013	59	57	53	46	52	68	74	6.5	59	50	50	56	59
	2014	60	57	53	46	52	69	74	65	5 9	50	50	56	60
	2015	60	58	53	4 6	5 2	6 <u>9</u>	74	65	59	5.0	50	56	6.0
•	2016	60	5 B	53	46	52	6 9	7 4	6.5	5 9	50	50	56	60
	2017	60	58	54	4 6	52	69	74	65	59	50	50	56	6.0
	2018	60	5 B	54	46	52	69	74	65	60	50	50	56	60
ä	2019	60	58	54	46	53	69	74	65	60	50	50	56	60
Projected	2020	60	58	54	46	. 53	69	74	6.5	60	50	51	56	60
ä	2021	60	58	54	47	53	69	7.5	66	60	50	51	56	60
ď	2022	60	58	54	47	53	70	75	66	60	51	5 1	56	60
	2023	61	58	5 4	47	53	70	75	66	60	5 1	5 1	57	6 1
	2024	6 1	59	54	47	53	70	75	66	60	51	5 1	57	6 1
	2025	61	59	5.5	47	53	70	75	66	60	51	51	57	61

Monthly Load Factors

	Year	Jan	Feb	Маг	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996													
	1997													
	1998													
rd	1999													
Ĕ	2000	-												
Histoncal	2001													
至	2002													
	2003													
	2004	79 8%	64 3%	65 6%	21 4%	49 6%	48 5%	46 6%	45 5%	35 6%	64 0%	90 2%	66 8%	55 5%
	2005	69 7%	52 3%	86 8%	78 2%	80 5%	53 1%	59 5%	53 9%	617%	70 9%	64 9%	74 1%	74 3%
	2006	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 8%	68 4%	59 0%
	2007	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 6%	68 3%	59 0%
	2008	58 0%	53 7%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 7%	68 3%	59 0%
Ö	2009	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	B1 7%	68 3%	59 0%
ថ្ង	2010	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 7%	68 3%	59 0%
Projected	2011	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 6%	68 3%	59 0%
ď.	2012	58 0%	53 7%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 6%	68 2%	59 0%
	2013	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 6%	68 2%	59 0%
	2014	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 6%	68 3%	59 0%
	2015	58 0%	55 6%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 6%	68 3%	59 0%
5 2	1996-2005	74 8%	58 3%	76 2%	49 8%	65 0%	50 8%	53 1%	49 7%	487%	67 5%	77 6%	70 4%	64 9%
Avg	2006-2015	58 0%	55 3%	69 3%	55 9%	60 9%	54 6%	53 1%	54 0%	53 1%	77 7%	81 7%	68 3%	59 0%

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Granite Falls Monthly Coincident-Peak Demand (MW)

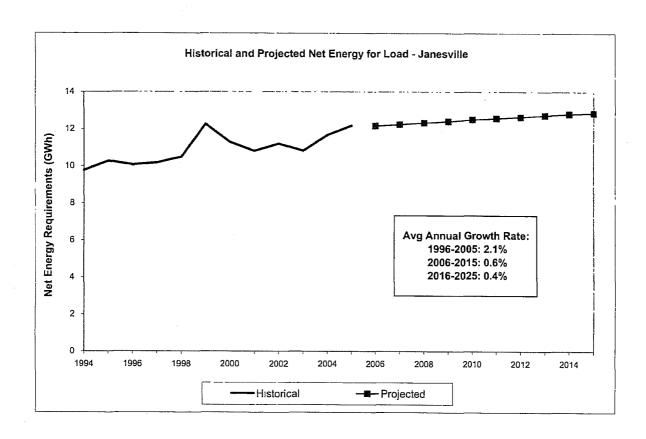
	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
-	2006	58	56	51	45	5 1	68	70	63	59	4 9	49	5 5	58
	2007	57	56	51	45	5 1	68	70	63	59	49	49	55	57
	2008	58	56	51	45	5 1	68	70	64	59	49	49	5 5	58
ㅁ	2009	58	56	5 1	45	5 1	68	70	64	59	49	49	55	58
ថ្ង	2010	58	56	51	45	5 1	68	70	64	59	50	49	55	58
Projected	2011	5 B	56	51	45	51	68	70	64	59	50	49	55	58
ă.	2012	58	56	51	45	52	68	70	64	59	50	4 9	55	58
	2013	58	57	51	4 5	5 2	6 B	70	64	59	50	49	55	58
	2014	58	57	52	4 5	52	69	70	64	59	50	50	5 5	58
_	2015	5.8	57	52	4 5	5 2	69	7 1	64	59	50	5 0	55	58
	2016	58	57	52	4 5	5 2	69	71	64	59	50	50	5.6	. 58
	2017	58	57	52	4 5	52	69	71	64	59	50	50	56	58
	2018	58	57	5 2	4 5	52	69	71	64	60	50	50	56	58
20	2019	5 8	57	52	45	5 2	69	71	64	60	50	50	56	5 B
Projected	2020	59	57	52	45	52	69	71	65	60	50	50	56	59
ā	2021	59	57	52	45	52	69	71	65	60	50	50	56	59
ō.	2022	59	5 B	52	46	52	70	72	65	6 0	5 1	50	56	59
	2023	59	58	52	46	53	70	72	65	60	51	50	56	59
	2024	59	58	53	46	53	70	72	6.5	60	5 1	5 1	57	59
	2025	59	58	53	4 6	53	7.0	72	6 5	60	5 1	51	57	5 9

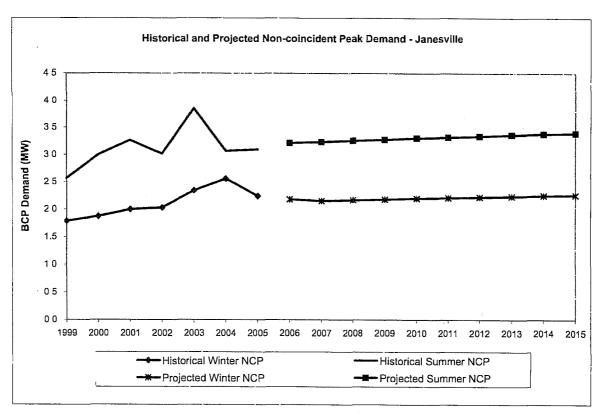
Monthly Coincidence Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	%0 ee	99 5%	97 3%
	2007	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
	2008	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
답	2009	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
컱	2010	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
ö	2011	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
n.	2012	97 3%	98.7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
	2013	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
	2014	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
	2015	97 3%	98 7%	96 6%	97 6%	99 2%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%
	2006-2015	97 3%	98 7%	96 6%	97 6%	98 7%	100 0%	95 6%	98 6%	100 0%	100 0%	99 0%	99 5%	97 3%

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Janesville
Historical and Projected Net Energy Requirements and Peak Demand

			 Mad F oresia					A1	C-ii-1	- 4 M			C -
				y Requireme		D	100			t Peak Dem		1	Co
		Actual		Normalized			Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	10,073	-	10,227	-	1.5%	1.8	-	63.5%	. 2.6		44.5%	#N/A
	1997	10,177	1 0%		0 9%		1.7	-4 6%	67.2%	2.6	-0.8%	45.4%	#N/A
	1998	10,482	3 0%	· ·	0 6%		20	157%	59.8%	27	5.4%	44 3%	.#N/A
m	1999	12,260	17.0%	12,133	16 8%		18	-10.8%	78.4%	26	-4.9%	54 5%	#N/A
높	2000	11,302	-7 8%	11,293	-6 9%	-0 1%	19	4.9%	68 9%	3 0	16.8%	43.0%	#N/A
Historical	2001	10,811	-4 3%	10,441	-7 5%	-3 4%	20	6.8%	61 7%	3 3	8 9%	37.8%	#N/A
I	2002	11,208	3 7%	10,716	2.6%	-4 4%	2.0	14%	63 1%	3 0	-7 7%	42 4%	#N/A
	2003	10,832	-3 4%	10,532	-1 7%	-2.8%	2.3	15 7%	52 7%	3.9	27 8%	32 1%	#N/A
	2004	11,675	7.8%	11,897	13 0%	1.9%	26	9.1%	52 1%	3 1	-20 3%	43 4%	#N/A
_	2005	12,184	4.4%	11,624	-2 3%	-4 6%	2.2	-12 4%	62.0%	3.1	0 8%	44 9%	#N/A
	2006	12,167	-0 1%	12,167	4.7%		2.2	-27%	63.7%	3.2	3.8%	43 2%	18
	2007	12,237	0 6%	12,237	0 6%		2.2	-1.4%	64.9%	3 2	0.6%	43.2%	18
	2008	12,326	0 7%	12,326	07%		22	0.7%	64 9%	33	0.7%	43.2%	18
	2009	12,409	0 7%	12,409	07%		22	0.7%	64.9%	3 3	0.7%	43.2%	1.9
	2010	12,506	0 8%	12,506	0.8%		22	0.8%	64.9%	3 3	0.8%	43 2%	1.9
	2011	12,575	0 6%	12,575	06%		22	0 6%	64.9%	3 3	0 6%	43 2%	19
	2012	12,644	0.5%	12,644	0 5%		22	0 5%	64 9%	3 3	0 5%	43.2%	19
	2013	12,731	0.7%	12,731	0 7%	ı	2.2	0.7%	64 9%	3.4	0.7%	43,2%	19
D	2014	12,809	0.6%	12,809	0 6%	i	2.3	0 6%	64 9%	3 4	0 6%	43 2%	19
Projected	2015	12,855	0.4%	12,855	0 4%		2.3	0.4%	64.9%	3.4	0.4%	43 2%	1.9
oje Oje	2016	12,889	0.3%		0 3%		2.3	0 3%	64.9%	3.4	0.3%	43.2%	19
ď	2017	12,928	0.3%		0 3%	1	23	0.3%	64.9%	3 4	0.3%	43 2%	19
	2018	12,965	0 3%	•	03%	1	23	0.3%	64.9%	3 4	0 3%	43.2%	1.9
	2019	13,017	0 4%				2,3			3 4	0 4%	43.2%	2.0
	2020	13,074	0 4%				23			3 5	0 4%	43 2%	2.0
	2021	13,131	0.4%				23			3 5	0 4%	43 2%	20
	2022	13,187	0.4%	•			2.3			3 5		43 2%	20
	2023	13,245		•			2.3			3.5		43 2%	20
	2024	13,300					2.3			3.5	0.4%	43 2%	20
	2025	13,351	0.4%				2.3			3.5			20
~ -	Thru 2005	10,001	2.1%		1 4%			2 4%			2.0%		
AAGR	2006-2015		0.6%		0.6%			04%			0.6%	43.2%	
Ą					0 4%			04%			0 4%		
-	2016-2025		0 4%	a	0.4%)		0 4%	64 9%		0 4%	43.2%	

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Janesville Monthly Net Energy Requirements (MWh)

_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Total
_	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NIA	#N/A	AINIF	#N/A	AIN#	#N/A	#N
預	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
Ĕ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
Historical	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
至	2002	900	787	864	775	789	1,035	1,334	1,051	949	891	864	970	11,20
	2003	926	818	834	762	780	907	1,132	1,152	863	849	845	962	10,8
	2004	1,030	906	898	810	854	948	1,200	1,009	1,036	955	945	1,084	11,67
	2005	1,050	861	922	825	873	1,149	1,372	1,161	997_	955	949	1,070	12,18
	2006	1,035	894	933	841	874	1,069	1,335	1,162	1,019	967	955	1,083	12,16
	2007	1,040	899	938	846	879	1,076	1,343	1,168	1,025	973	961	1,089	12,2
	2008	1,048	906	945	852	885	1,083	1,353	1,177	1,032	980	967	1,097	12,3
2	2009	1,055	912	951	858	891	1,091	1,362	1,185	1,039	986	974	1,104	12,40
Projected	2010	1,063	919	959	865	898	1,099	1,372	1,194	1,047	994	982	1,113	12,50
ē	2011	1,069	924	964	870	903	1,105	1,380	1,201	1,053	1,000	987	1,119	12,5
ď.	2012	1,075	929	969	874	908	1,111	1,388	1,207	1,059	1,005	992	1,125	12,6
	2013	1,083	936	976	881	914	1,119	1,397	1,215	1,066	1,012	999	1,133	12,73
	2014	1,089	941	982	886	920	1,126	1,406	1,223	1,073	1,018	1,005	1,140	12,80
	2015	1,093	945	986	889	923	1,130	1,411	1,227	1,076	1,022	1,009	1,144	12,8
	2016	1,096	947	886	891	926	1,133	1,414	1,230	1,079	1,025	1,012	1,147	12.8
	2017	1,099	950	991	894	928	1,136	1,419	1,234	1,082	1,028	1,015	1,151	12,93
	2018	1,102	953	994	897	931	1,140	1,423	1,238	1,086	1,031	1,018	1,154	12,96
교	2019	1,107	957	998	900	935	1,144	1,429	1,243	1,090	1,035	1,022	1,159	13,0
Projected	2020	1,112	961	1,002	904	939	1,149	1,435	1,248	1,095	1,039	1,026	1,164	13,07
Ē	2021	1,117	965	1,007	908	943	1,154	1,441	1,254	1,099	1,044	1,031	1,169	13,13
ā	2022	1,121	969	1,011	912	947	1,159	1,447	1,259	1,104	1,048	1,035	1,174	13,18
	2023	1,126	973	1,015	916	951	1,164	1,454	1,264	1,109	1,053	1,040	1,179	13,24
	2024	1 131	977	1,020	920	955	1,169	1,460	1,270	1,114	1,057	1,044	1,184	13,30
	2025	1,135	981	1,024	923	959	1,173	1,465	1,275	1,118	1,061	1,048	1,188	13,3

	Year	Jan	Feb	Mar	Apr	May	្សា ។	Jul	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#Ň/A	#N/A	#N.
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#IN/A	#N/A	#N
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/A	#N/A	#N/A	#N.
뜛	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N.
Ŧ	2002	8 0%	7 0%	77%	69%	7 0%	9 2%	11 9%	9 4%	8 5%	7 9%	7 7%	87%	100 0
	2003	8 5%	7 6%	7 7%	7 0%	7 2%	8 4%	10 5%	10 6%	8 0%	7 8%	7 8%	8 9%	100 0
	2004	8 8%	7 8%	7 7%	6 9%	7 3%	8 1%	10 3%	8 6%	8 9%	8 2%	B 1%	93%	100 O
_	2005	8 6%	7 1%	76%	6 8%	7 2%	9 4%	11 3 <u>%</u>	9 5%	8 2%	7.8%	7.8%	0 0%	100 0
	2006	8 5%	7 3%	77%	6 9%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0
	2007	8 5%	7 3%	77%	59%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7.8%	8 9%	100 0
	2008	8 5%	7 3%	7 7%	6 9%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0
맖	2009	8 5%	7 3%	77%	6 9%	7 2%	88%	11 0%	9 6%	8 4%	7 9%	7 8%	8 9%	100 0
rojected	2010	8 5%	7 3%	7 7%	6 9%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0
Ğ	2011	8 5%	7 3%	77%	69%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0
ŭ.	2012	B 5%	7 3%	7 7%	8 9%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	. 100 0
	2013	8 5%	7 3%	7 7%	6 9%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0
	2014	8 5%	7 3%	77%	6 9%	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0
	2015	8 5%	7 3%	77%	6 9%	7.2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	89%	100 0
±i 1	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
₹ _2	2006-2015	8 5%	7 3%	77%	69%_	7 2%	8 8%	11 0%	9 5%	8 4%	7 9%	7 8%	8 9%	100 0

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Janesville Monthly Non-Coincident Peak Demand (MW)

_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk 9
	1996	#N/A												
	1997	#N/A												
•	1998	#N/A												
Ħ	1999	#N/A	#Ň/A	#N/A	#N/A	#N/A	#N/A							
Historical	2000	#N/A												
욣	2001	#N/A	#N/A	#N/A	#N/A	#N/A	28	3 1	33	19	17	19	20	#N/A
Ī	2002	19	17	17	17	20	30	3 0	26	29	18	18	2 1	2 0
	2003	23	23	21	20	20	35	35	39	29	23	23	26	23
	2004	20	18	17	16	16	26	3 1	26	25	18	20	2 2	26
	2005	20	18	17	16	16	30	31	3 1	25	22	21	22	2 2
-	2006	20	18	17	17	17	30	32	30	26	21	20	22	2 2
	2007	20	1 B	18	17	17	30	32	30	26	2 1	20	22	2 2
	2008	20	19	18	17	18	30	33	3 1	26	21	20	22	22
20	2009	20	19	18	17	18	30	33	3 1	26	2 1	20	2 2	2 2
Projected	2010	21	19	18	17	18	30	33	3 1	27	2 1	20	22	22
충	2011	21	19	18	17	18	31	33	31	27	2 1	20	2 2	22
ď.	2012	21	19	18	17	18	31	33	31	27	21	20	22	22
	2013	21	19	18	17	18	31	34	32	27	22	21	23	22
	2014	21	19	18	18	18	3 1	34	32	27	22	2 1	23	2 3
	2015	21	19	18	18	18	31	34	3 2	27	22	21	23	23
	2016	21	19	19	18	18	3 1	34	3 2	27	22	21	23	23
	2017	21	19	19	18	18	3 1	34	32	27	22	21	23	2 3
	2018	2 1	20	19	18	19	3 1	3 4	3 2	28	22	21	23	23
먑	2019	21	20	19	18	19	32	34	3 2	28	22	21	23	. 23
ថ្ង	2020	22	20	19	18	19	32	35	3 2	28	. 22	21	23	23
Projected	2021	22	20	19	18	19	32	3.5	3 3	28	22	21	23	23
e.	2022	22	20	19	18	19	32	35	3 3	28	22	21	23	2 3
	2023	22	20	19	18	19	32	35	3 3	28	23	21	23	23
	2024	22	20	19	18	19	32	35	33	28	23	2 1	23	23
	2025	2.2	20	19	18	19	32	3.5	33	2.8	2 3	21	2 4	2 3

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996							-						
	1997													
	1998													
ī	1999												•	
Historical	2000													
뜛	2001													
茔	2002	62 4%	68 1%	67 9%	63 9%	52 1%	48 2%	59 5%	54 3%	45 6%	67 6%	66 3%	63 3%	63 1%
	2003	53 0%	53 1%	53 3%	52 6%	53 6%	36 0%	43 0%	40 2%	41 4%	49 1%	50 9%	50 5%	52 7%
	2004	69 5%	71 6%	70 9%	72 5%	70 3%	50 5%	52 5%	52 1%	57 7%	71 5%	65 5%	64 9%	52 1%
	2005	69 3%	69 9%	71 4%	73 8%	72 8%	53 6%	59 7%	50 4%	56 5%	58 4%	63 0%	65 9%	62 0%
	2006	69 3%	72 5%	71 8%	70 1%	67 6%	50 3%	55 8%	51 7%	54 7%	62 9%	67 6%	67 6%	63 7%
	2007	69 3%	72 5%	71 8%	70 1%	67 6%	50 3%	55 8%	517%	54 7%	62 9%	67 5%	67 5%	64 9%
	2008	69 3%	70 0%	71 B%	70 1%	67 6%	50 3%	55 8%	51 7%	54 7%	62 9%	67 5%	67 6%	64 9%
2	2009	69 3%	72 5%	71 8%	70 1%	67 6%	50 3%	55 8%	51 7%	54 7%	62 9%	67 5%	67 5%	64 9%
Projected	2010	69 3%	72 5%	71 8%	70 1%	67 6%	50 3%	55 8%	51 7%	54 7%	62 9%	67 6%	67 6%	64 9%
ĕ	2011	69 3%	72 5%	71 8%	70 1%	67 6%	50 3%	55 8%	51 7%	54 7%	62 9%	67 6%	67 6%	64 9%
ď.	2012	69 3%	70 0%	71 8%	70 1%	67 6%	50 3%	55 8%	51 7%	54 7%	62 9%	67 5%	67 5%	64 9%
	2013	69 3%	72 5%	71 8%	70 1%	67 6 %	50 3%	55 8%	517%	54 7%	62 9%	57 6%	67 6%	64 9%
	2014	69 3%	72 5%	7,1 8%	70 1%	67 6%	50 3%	55 8%	517%	54 7%	62 9%	67 7%	67 8%	64 9%
	2015	69 3%	72 5%	71 8%	70 1%	67 6%	50 3%	55 8%	517%	54 7%	62 9%	67 8%	67 8%	64 9%
ρ'n	1996-2005	63 5%	65 7%	65 9%	65 7%	62 2%	47 1%	53 7%	49 2%	50 3%	61.6%	61 4%	61 2%	57 5%
Avg	2006-2015	69 3%	72 0%	71 B%	70 1%	67 6%	50 3%	55 8%	51,7%	54 7%	62 9%	67 6%	67 6%	64 8%

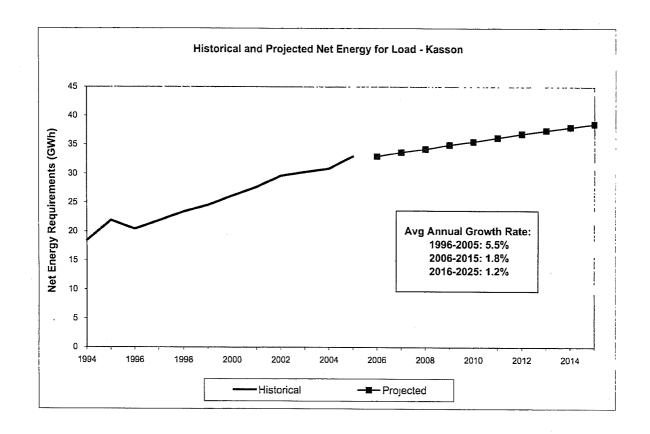
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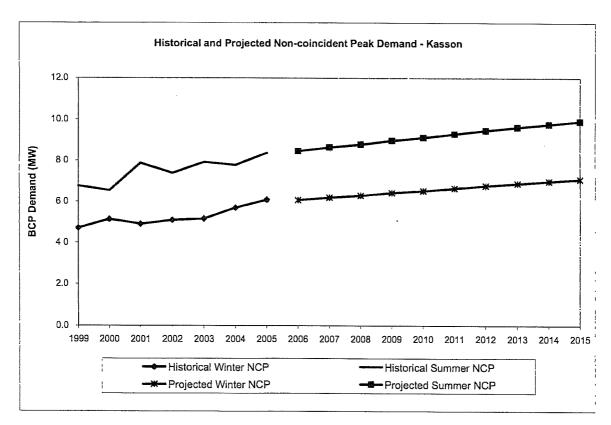
Janesville Monthly Coincident-Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	· Wntr Pk
-	2006	18	15	15	14	16	28	29	28	2 4	17	19	21	18
	2007	18	15	15	14	16	28	29	28	24	17	19	2 1	18
	2008	18	15	15	15	16	28	30	29	24	17	19	2 1	18
72	2009	19	15	15	15	16	28	30	29	2 4	17	20	21	19
귷	2010	19	16	15	15	16	29	30	29	24	17	20	2 1	19
Projected	2011	19	16	15	15	16	. 29	30	29	25	17	20	2 1	19
ā.	2012	19	16	15	15	17	29	30	29	2.5	18	20	22	19
	2013	19	16	15	15	17	29	3 1	3 D	2.5	18	20	22	19
	2014	19	16	15	15	17	29	3 1	30	2 5	18	20	22	19
	2015	19	16	15	15	17	29	3 1	3 0	2.5	18	2 0	_22	19
	2016	19	16	15	15	17	30	3 1	3 0	2 5	18	20	22	19
	2017	19	16	16	15	17	30	31	30	25	18	20	22	19
	2018	19	16	16	15	17	30	3 1	30	2 5	18	20	22	19
2	2019	20	16	16	15	17	30	3 1	. 30	2 5	18	2 1	22	20
Projected	2020	20	18	16	15	17	30	3 1	30	26	18	2 1	22	20
ğ	2021	20	16	16	1.5	17	30	32	3 1	26	18	2 1	22	20
ď.	2022	20	16	16	16	17	30	32	3 1	26	18	2 1	22	20
	2023	20	17	16	16	17	30	3 2	3 1	26	18	21	23	20
	2024	20	17	16	1.5	17	30	32	3 1	26	19	21	23	20
	2025	20	17	16	16	17	31	32	31	26	19	21	23	2 0

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	91 8%	81 9%	97 9%	96 6%	83 6%
	2007	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	91.8%	81 9%	97 9%	96 6%	85 2%
	2008	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	918%	81 9%	97 9%	96 6%	85 2%
Di di	2009	90 8%	82 8%	83 7%	86 3%	916%	94 3%	91 1%	93.8%	91.8%	81 9%	97 9%	96 6%	85 2%
ğ	2010	90 B%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	91.8%	81 9%	97 9%	96 6%	85 2%
ĕ	2011	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	918%	81 9%	97 9%	96 6%	85 2%
ā.	2012	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	91 8%	81 9%	97 9%	96 6%	85 2%
	2013	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	91 8%	81 9%	97 9%	96 6%	85 2%
	2014	90 8%	82 8%	83 7%	86 3%	91 6%	94 3%	91 1%	93 8%	91 8%	81 9%	97 9%	96 6%	85 2%
	2015	90 8%	82 8%	83 7%	86 3%	91.6%	94 3%	91 1%	93 8%	91.8%	81 9%	97 9%	96 6%	85 2%
	2006-2015	90 8%	82 8%	83 7%	86 3%	82.8%	94 3%	91 1%	93 8%	91 8%	81 9%	97 9%	96 6%	85 0%

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Kasson
Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	gy Requirem	ents (CY)			Non-	Coincider	it Peak Dem	and		С
		Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	20,427		19,943	•	-24%	3.9	•	59,9%	5 1	-	45 8%	#N//
	1997	21,847	7.0%	21,960	10 1%	0 5%	40	2.2%	62.6%	5 4	5.7%	46.3%	#N//
	1998	23,409	7.1%	24,970	13 7%	6.7%	4 5	11.9%	60.0%	58	8 2%	45 8%	#N//
TO TO	1999	24,565	4.9%	25,788	3.3%	50%	47	5.7%	59.5%	68	16.0%	41 5%	#N//
ř	2000	26,146	6 4%	26,802	3 9%	2.5%	5.1	9.2%	58.1%	6.5	-3 2%	45.6%	#N/A
Historical	2001	27,672	5.8%	28,053	4 7%	14%	4.9	-4 6%	64 4%	79	20 3%	40.1%	#N/A
I	2002	29,607	7.0%	29,325	4 5%	-10%	5 1	3 9%	66 3%	74	-6 2%	45.8%	#N//
	2003	30,286	2.3%	30,233	3.1%	-0 2%	5 2	1.2%	67 0%	79	7 3%	43.7%	#N//
	2004	30,877	2.0%	32,356	7 0%	4 8%	57	10 4%	61 9%	78	-1.8%	45.3% -	#N/A
_	2005	32,992	6.8%	33,401	3 2%	1 2%	6 1	7 0%	61 8%	8 4	7.6%	45 0%	#N/A
	2006	33,001	0 0%	33,001	-1 2%		6.1	-0.3%	62 0%	8 5	1 3%	44 5%	5 7
	2007	33,705	2 1%	33,705	2 1%		62	2.0%	62 1%	87	2 1%	44.5%	5 8
	2008	34,240	1 6%	34,240	1 6%		63	1.6%	62 1%	8.8	1 6%	44 5%	5 9
	2009	34,956	2.1%	34,956	2 1%		6 4	2 1%	62 1%	9.0	2 1%	44.5%	6 0
	2010	35,526	1.6%	35,526	1.6%		65	1 6%	62 1%	9 1	1 6%	44.5%	6 1
	2011	36,184	1.9%	36,184	1.9%		6.7	1 9%	62.1%	93	1.9%	44.5%	6 2
	2012	36,867	1.9%	36,867	1 9%		68	1.9%	62 1%	9 5	1 9%	44 5%	6.3
	2013	37,466	1 6%	37,466	1 6%		6 9	1 6%	62.1%	96	1 6%	44 5%	6.4
ed	2014	38,035	1 5%	38,035	1 5%		70	1.5%	62 1%	9.8	1 5%	44.5%	6.5
Projected	2015	38,581	1 4%	38,581	1 4%		7.1	1 4%	62.1%	9.9	1 4%	44.5%	6 6
ē	2016	39,113	1.4%	39,113	1 4%		7.2	1 4%	62 1%	10 0	1 4%	44 5%	6.7
Δ.	2017	39,638	1 3%	39,638	1 3%		73	1 3%	62 1%	10 2	1.3%	44 5%	68
	2018	40,148	1.3%	40,148	1.3%		7 4	1 3%	62 1%	10 3	1.3%	44 5%	6.9
	2019	40,636	1 2%	40,636	1 2%		7.5	1.2%	62.1%	10.4	1 2%	44.5%	70
	2020	41,124	1.2%	41,124	1.2%		76	1 2%	62 1%	10 6	1 2%	44.5%	7 1
	2021	41,614	1 2%	41,614	1 2%		7.6	1 2%	62 1%	10.7	1 2%	44 5%	7 1
	2022	42,096	1 2%	42,096	1 2%		77	1.2%	62 1%	108	1 2%	44 5%	7.2
	2023	42,563	11%	42,563	1 1%		78	1.1%	62 1%	10.9	1.1%	44 5%	7.3
	2024	43,015	1 1%	43,015	1 1%		79	1 1%	62.1%	11 0	1 1%	44.5%	7.4
	2025	43,492	11%	43,492	1 1%		8.0	11%	62 1%	11 2	11%	44 5%	7 5
ιχ	Thru 2005		5 5%	1	5 9%			5 1%	62 2%		5 7%	44 5%	
AAGR	2006-2015	•	1.8%	,	1 8%			1 7%	62 1%		1.8%	44 5%	
Q.	2016-2025		1.2%	ı	1 2%			1.2%	62.1%		1.2%	44 5%	

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Kasson Monthly Net Energy Requirements (MWh)

_	Year	Jan	Feb	Маг	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Total
	1996	#N/A	#N/											
	1997	#N/A	#N/											
	1998	#N/A	#N/											
77	1999	#N/A	#N/											
Έ	2000	#N/A	#N/											
Historical	2001	2,294	2,087	2,120	1,964	2,081	2,447	2,997	2,839	2,079	2,145	2,166	2,453	27,67
Ξ.	2002	2,388	2,111	2,303	2,067	2,135	2,684	3,277	2,779	2,502	2,369	2,387	2,605	29,60
	2003	2,660	2,328	2,382	2,147	2,161	2,477	3,053	3,175	2,430	2,347	2,407	2,720	30,28
	2004	2,800	2,442	2,433	2,161	2,284	2,538	3,024	2,635	2,647	2,468	2,548	2,897	30,87
_	2005	2,789	2,332	2,471	2,187	2,269	2,944	3,438	3,054	2,628	2,555	2,468	3,857	32,99
	2006	2,815	2,464	2,553	2,296	2,386	2,853	3,445	3,163	2,675	2,590	2,612	3,149	33,00
	2007	2,876	2,517	2,607	2,345	2,437	2,914	3,518	3,230	2,732	2,645	2,667	3,217	33,70
	2008	2,921	2,557	2,649	2,383	2,475	2,960	3,574	3,282	2,775	2,687	2,710	3,268	34,24
8	2009	2,983	2,610	2,704	2,433	2,527	3,022	3,649	3,350	2,833	2,743	2,766	3,336	34,95
ដ្ឋ	2010	3,031	2,653	2,748	2,472	2,568	3,072	3,708	3,405	2,879	2,788	2,811	3,390	35,52
Projected	2011	3,087	2,702	2,799	2,518	2,616	3,128	3,777	3,468	2,933	2,839	2,863	3,453	36,18
ā	2012	3,146	2,753	2,852	2,566	2,665	3,188	3,848	3,533	2,988	2,893	2,918	3,518	36,86
	2013	3,197	2,797	2,898	2,607	2,708	3,239	3,911	3,591	3,037	2,940	2,965	3,576	37,45
	2014	3,245	2,840	2,942	2,647	2,750	3,289	3,970	3,645	3,083	2,985	3,010	3,630	38,03
_	2015	3,292	2,881	2,984	2,685	2,789	3,336	4,027	3,698	3,127	3,028	3,053	3,682	38,58
	2016	3,337	2,920	3,025	2,722	2,827	3,382	4,083	3,749	3,170	3,069	3,095	3,733	39,11
	2017	3,382	2,980	3,066	2,758	2,865	3,427	4,138	3,799	3,213	3,111	3,137	3,783	39,63
	2018	3,426	2,998	3,106	2,794	2,902	3,471	4,191	3,848	3,254	3,151	3,177	3,832	40,14
10	2019	3,467	3,034	3,143	2,828	2,938	3,513	4,242	3,895	3,293	3,189	3,216	3,878	40,63
Projected	2020	3,509	3,071	3,181	2,862	2,973	3,556	4,293	3,941	3,333	3,227	3,254	3,925	41,12
Ğ	2021	3,551	3,107	3,219	2,896	3,008	3,598	4,344	3,988	3,373	3,256	3,293	3,971	41,61
ē.	2022	3,592	3,143	3,256	2,929	3,043	3,640	4,394	4,035	3,412	3,303	3,331	4,017	42,09
	2023	3,632	3,178	3,292	2,962	3,077	3,680	4,443	4,079	3,450	3,340	3,368	4,062	42,56
	2024	3,670	3,212	3,327	2,993	3,110	3,719	4,490	4,123	3,486	3,376	3,404	4,105	43,01
_	2025	3,711	3,247	3,364	3,027	3,144	3,760	4,540	4,168	3,525	3,413	3,442	4,151	43,49
												.,		

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/A	#N/A	#/N/A	1/N/A	#N/A	#N/A	#N/A	#N/
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	INIA	#N/A	#N/A	#N/A	#N/
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
按	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
Historical	2001	8 3%	7 5%	7 7%	7 1%	7 5%	8 8%	10 8%	10 3%	7 5%	7 8%	7 8%	8 9%	100 09
Ŧ	2002	8 1%	7 1%	7 8%	7 0%	7 2%	9 1%	11 1%	9 4%	8 5%	8 0%	8 1%	88%	100 09
	2003	88%	7 7%	7 9%	7 1%	7 1%	8 2%	10 1%	10 5%	8 0%	7 7%	7 9%	90%	100 07
	2004	9 1%	7 9%	7 9%	7 0%	7 4%	8 2%	9 8%	8 5%	8 6%	8 0%	8 3%	9 4%	100 07
	2005	8 5%	7 1%	7 5%	6 6%	6 9%	8 9%	10 4%	9 3%	8 0%	77%	7 5%	117%	100 07
	2006	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	9 5%	100 07
	2007	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	9 5%	100 05
	2008	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7.8%	7 9%	95%	100 09
e	2009	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	95%	100 09
ដ	2010	8 5%	7 5%	77%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	9 5%	100 09
Projected	2011	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	9 5%	100 07
ď.	2012	8 5%	7 5%	77%	7 0%	7 2%	8 6%	10 4%	9 8%	8 1%	7 8%	7 9%	9 5%	100 09
	2013	B 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	95%	100 09
	2014	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	95%	100 0%
	2015	8 5%	7 5%	77%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	9 5%	100 0%
Avg.	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	AINI	#N/A	#N/
á	2006-2015	8 5%	7 5%	7 7%	7 0%	7 2%	8 6%	10 4%	9 6%	8 1%	7 8%	7 9%	9 5%	100 09

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Kasson Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sen	Oct	Nov	D	144-4-51
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		Dec	Wntr Pk
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A			#N/A	#N/A	#N/A
	1998	#N/A	#N/A	#N/A #N/A	#N/A	#N/A	#N/A #N/A	#N/A		. #N/A	#N/A	#N/A	#N/A	#N/A
_								#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
8	1999	#N/A	#N/A	#N/A	//N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
5	2001	49	4 4	. 41	39	52	6 4	7 4	7 9	47	47	5 0	51	#NIA
Ŧ	2002	48	47	46	4 5	5 4	71	74	6 5	70	47	4 9	5 2	5 1
	2003	51	50	47	4.5	43	72	69	7 9	68	48	5 1	5 5	52
	2004	57	51	49	4 5	48	70	78	69	70	48	5 5	6 1	57
	2005	56	52	50	4.5	4.5	81	84	82	70_	66	56	6 1	61
	2006	58	5 5	53	47	50	76	8 5	80	70	57	5 8	62	61
	2007	60	56	54	48	51	78	87	81	72	58	59	63	62
	2008	61	57	55	49	52	79	88	83	73	59	60	64	E 3
딥	2009	62	58	56	50	53	8 1	90	84	7.4	60	6 1	6.5	64
ij	2010	63	59	57	50	54	82	9 1	86	75	6 1	6 2	67	6.5
Projected	2011	64	60	58	51	55	84	93	87	77	62	63	6.8	67
Ď.	2012	65	61	59	5 2	56	B 5	95	89	78	63	8.4	69	68
	2013	66	62	60	53	57	87	96	90	80	64	6.5	70	69
	2014	67	63	61	54	58	88	98	92	8 1	65	6 6	71	7.0
	2015	68	64	62	55	58	8 9	99	93	82	6.6	67	72	71
	2016	69	65	6.3	56	59	9.0	10.0	94	83	67	6.8	73	72
	2017	70	66	64	56	60	92	10 2	96	8.4	6.8	6 9	74	73
	2018	71	67	6.5	57	6 1	93	103	97	8.5	69	6.9	7.5	7.4
Ď.	2019	72	67	65	58	61	94	10 4	98	86	70	70	7.6	75
Projected	2020	73	68	6.6	58	62	95	106	99	87	70	7 1	76	76.
쁭	2021	74	69	67	59	63	96	10 7	100	88	71	7 2	77	76
Ď.	2022	75	70	-6.8	60	64	97	108	10 2	89	72	73	78	77
	2023	75	71	6.9	60	64	98	10 9	103	90	73	74	79	7 B
	2024	76	71	6.9	61	65	99	11 0	104	91	7.4	74	80	79
	2025	77	72	70	62	66	10 1	11 2	10.5	92	7.4	7.5	81	80
				·					100					

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996													
	1997													
	1998													
77	1999													
Ξ	2000													
Historical	2001	62 9%	70 1%	6B 7%	69 7%	53 5%	53 1%	54 3%	48 5%	62 0%	61 8%	60 5%	64 7%	
Ī	2002	67 1%	67 2%	66 6%	64 0%	53 5%	52 5%	59 7%	57 3%	49 5%	67 5%	68 0%	67 9%	66 3%
	2003	69 7%	68 6%	67 7%	66 8%	68 2%	47 7%	59 3%	53 9%	49 5%	65 6%	65 2%	66 3%	67 0%
	2004	66 1%	68 1%	67 1%	65 7%	64 6%	50 7%	52 2%	51 3%	52 4%	68 7%	64 B%	63 9%	61 9%
	2005	67 1%	67 3%	66 6%	67 1%	68 0%	50 3%	55 2%	50 1%	52 3%	52 2%	61 6%	85 4%	61 8%
	2006	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 0%	68 3%	62 0%
	2007	64 7%	67 0%	64 6%	6B 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 3%	68 7%	62 1%
	2008	64 7%	64 7%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	616%	63 0%	68 4%	62 1%
ם	2009	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 3%	687%	62 1%
ភ្ជ	2010	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	616%	63 1%	68 5%	62 1%
Projected	2011	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 1%	68 5%	62 1%
ā	2012	64 7%	64 7%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 3%	687%	62 1%
	2013	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 3%	687%	62 1%
	2014	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 4%	68 8%	62 1%
	2015	64 7%	67 0%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	53 0%	61 6%	63 4%	68 8%	62 1%
Avg	1996-2005	66 6%	68 2%	67 3%	66 6%	61 6%	50 9%	56 1%	52 2%	53 1%	63 2%	64 0%	69 7%	64 3%
Æ	2006-2015	64 7%	66 5%	64 6%	68 0%	64 2%	51 9%	54 6%	53 4%	_ 53 0% _	616%	63 2%	68 6%	62 1%

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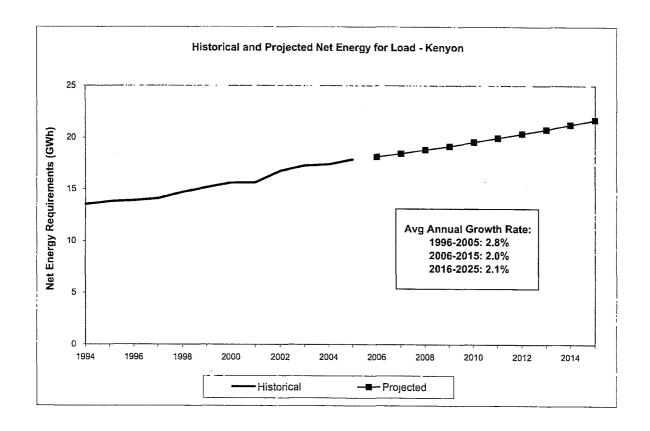
Wasson Monthly/Concident-Peak/Demand(NWV)

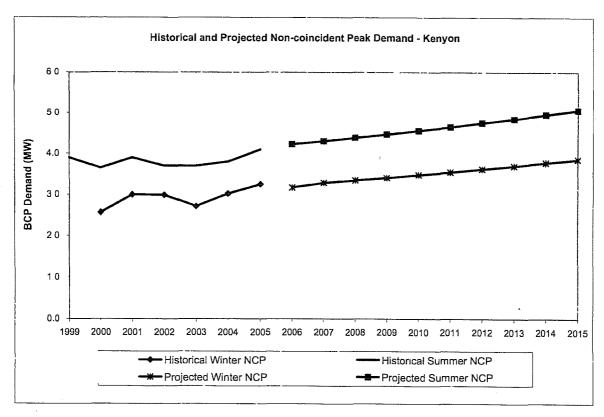
_	Yerze	Jalan	Fele	MMar	Адрг	MMay	Julon	انالال	AAgg	S&pp	O6tct	NNev	DBec	WMMPRK
	2006	597	444	448	4481	447	440(7783	7756	660	442	5 5 5	661	557
	202070	5 9 8	455	4499	441	4409	44.	774	777	662	4433	556	662	5588
	2000	599	466	5500	465	4499	442:	7755	7199	663	4483	557	653	559
Projected	2000	660	477	551	463	5590	448:	777	8.00	684	444	558	6 5 5	6600
ដូដ្ឋ	20200	661	477	551	441	55 1	448:	7788	822	655	4465	559	666	661
7	2001	662	488	552	4483	5522	441	8 5 0 D	883	666	4466	660	687	6622
<u> </u>	20202	663	499	553	4493	553	445!	881	855	667	447	661	688	663
	2003	644	500.	554	4493	554	4466	883	856	688	447	6622	689	604
	20204	6 5 5	511	5 5 5	5 Đ)	5 5 5	4466	884	887	6699	4488	663	7700	655
_	202051	6 6 6	511	556	55	556	447	885	889	7700	4409	684	7711	666
	20208	667	522	597	522	556	4481	886	990	7711	4499	644	7722	667
	202071	668	533	597	552 ?	5 5 7	4481	887	991	7722	550	655	7783	688
	20208	6 9 9	533	5 2 88	553	558	449!	889	992	7733	551	666	7744	699
Projected	20209	7700	544	599	541	5588	4401	9910	993	7714	551	667	7755	7700
ដូដូ	20202	7711	5 \$ 5	6600	5# 1	5599	550(9911	994	7755	5522	688	7256	7711
ซืซี	2022	7711	555	6600	553	660	55.	922	956	716G	553	688	7166	7711
44	20202	722	566	661	553	661	55.	993	997	7777	553	669	777	7722
	20202	783	577	662	553	681	52:	994	998	7738	5 3 4	7700	7728	7733
	202042	7714	577	662	5 <i>9 1</i>	622	552;	955	999	7199	584	77/1	729	7714
_	207252	7155	588	663	591	683	5 5 (956	10000	7199	5 5 5	7722	880	7755

Mouthly Combidened Eathers

	YiVæ2	Jalan	FE⊫	MMar	Appr	ММуху	Julan	Julul	AAgg	SSep	Othict	Nbbv	DBec	W/miPRk
	2006	9 964 %	8835%	9905%	982%%	995%%	53535	8899%	9932%	86674%	7337%	9997%	9888%	9322%
	2000	9567%	8033%	9904%	922%%	999%	52525 W.	8894%	99972%	866 W/	7 33% %	999%	9 888 %	933%
	2000B	95672%	80135%	9 00 0%	997%%	999%	525250	8899%	993%%	88504%	733%	993 %%	9555%	933%%
Projected Projected	2009	9964%	80353%	9900%	922%%	999 %%	5 225	8899%	995%%	8660	733%%	999%%	9 999 %	9335%
ដូច្ឆ	202001	99678%	8033%	99011%	922%%	999%%	5 335 191	8899%	9992%	8654%	733%%	999%	9888%	933%%
~~~	20201	9 564 %	8 8 63 2 %	9 90%	922%%	999 %%	5 554	8899%	99971%	8864%	733%%	995%	9989%	993%%
άā.	20202	9968%	801371%	9 90'0 %	9217%%	999%	522W	8999%	9997%	8004%	733%%	995%	9888%	Weee
	20203	9 967 %	801373%	9 90% %	922%%	995 %%	52525181	8999%	993%%	8667%	7337%	995 %%	99848%	933%%
	20204	9 967 %	8033%	9 90%	927%%	999%	5 35 5	8999%	99974%	865W/	733%%	995%	9889%	9935%
	20205	9965%	80335%	9 907 %	922%%	999%	52525433	8959%	955%%	865 48%	733%%	955 %%	9864%	933%%
	2000-02015	9 907 %	B0813*58%	99078%	927%%	88039%	5 55 8	8899%	995%%	865 73%	733%%	995%	9888%	9935%

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Kenyon
Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	gy Requireme	ents (CY)			Non-	Coinciden	it Peak Dem	and		C
	•	Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	13,905	*	13,813	-	-0 7%	24	-	65 2%	3.2	-	49 1%	#N/
	1997	14,084	1 3%	14,164	2 5%	0.6%	26	7 1%	61 6%	33	1 9%	48.8%	#N/#
	1998	14,697	4 4%	15,080	6 5%	2 6%	28	5 5%	60 9%	3 7	12.3%	45 3%	#N/
त्त्	1999	15,175	3 3%	15,458	2.5%	1 9%	#N/A	#N/A·	#N/A	39	5.4%	44 4%	#N/A
ij	2000	15,599	2 8%	15,765	2 0%	1 1%	2,6	#N/A	69 6%	37	-6.4%	48 8%	#N/A
Historical	2001	15,644	0 3%	15,602	-1 0%	-0 3%	30	17.2%	59 5%	3.9	6 8%	45 8%	#N/A
I	2002	16,765	7 2%	16,510	5 8%	-1 5%	30	-0.4%	64.0%	3.7	-5 1%	51.7%	#N//
	2003	17,292	3 1%	17,159	3 9%	-0.8%	27	-9.3%	72.8%	3.7	0 0%	53.4%	#N//
	2004	17,424	0 8%	17,865	4 1%	2 5%	30	11.3%	65.9%	3.8	27%	52 3%	#N//
_	2005	17,874	2 6%	17,761	-0 6%	-0.6%	3.2	7 6%	62.8%	4.1	7 9%	49 8%	#N//
	2006	18,115	1.3%	18,115	2 0%		3.2	-2 4%	65.2%	4.2	3 1%	48 9%	2.9
	2007	18,445	1.8%	18,445	18%		33	3 5%	64 1%	4 3	18%	48.9%	29
	2008	18,812	2 0%	18,812	2 0%		33	2 0%	64 1%	4 4	20%	48.9%	3 0
	2009	19,156	1 8%	19,156	1 8%		3 4	1.8%	64 1%	4.5	18%	48.9%	3 0
	2010	19,548	2 0%	19,548	2.0%		35	2 0%	64 1%	4 6	2 0%	48.9%	3 1
	2011	19,948	2 0%	19,948	2 0%		36	2 0%	64 1%	47	20%	48 9%	3 2
	2012	20,363	2.1%	20,363	2 1%		36	2.1%	64 1%	4 8	2.1%	48 9%	3 2
	2013	20,780	2 1%	20,780	2 1%		37	2 1%	64 1%	4 9	2 1%	48.9%	3 3
þ	2014	21,238	2 2%	21,238	2 2%		38	2.2%	64 1%	5 0	2.2%	48 9%	3 4
Projected	2015	21,698	2 2%	21,698	2 2%		39	2.2%	64 1%	5 1	2 2%	48.9%	3 4
õ	2016	22,163	2 1%	22,163	2 1%		39	2.1%	64.1%	5 2	2.1%	48.9%	3.5
Δ.	2017	22,622	2 1%	22,622	2 1%		40	2 1%	64 1%	5 3	21%	48 9%	3.6
	2018	23,086	2 1%	23,086	2 1%		4.1	2 1%	64 1%	5.4	2 1%	48 9%	3.7
	2019	23,561	2 1%	23,561	2 1%		4.2	2 1%	64 1%	5 5	2 1%	48 9%	3.7
	2020	24,047	2 1%	24,047	2 1%		4.3	2.1%	64 1%	5.6	2 1%	48 9%	38
	2021	24,551	2 1%	24,551	2 1%		4 4	2 1%	64.1%	5.7	2 1%	48 9%	3.9
	2022	25,066	2 1%	25,066	2 1%		4 5	2 1%	64 1%	5.9	2 1%	48 9%	4.0
	2023	25,591	2.1%	25,591	2.1%		46	2 1%	64.1%	6.0	2 1%	48.9%	4 1
	2024	26,125	2 1%	26,125	2 1%		47	2 1%	64.1%	6.1	21%	48 9%	4 1
	2025	26,670	2 1%	26,670	2 1%		47	2 1%	64 1%	6 2	2 1%	48 9%	4 2
ŭ	Thru 2005		2 8%		28%			3 2%	#N/A		27%	48.9%	
AAGR	2006-2015		2 0%		2 0%			2 2%	64 2%		2.0%	48.9%	
⋖	2016-2025		2 1%		2 1%			2 1%	64 1%		21%	48 9%	

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Kenyon Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Tot
•	1996	#N/A	#N/A	#N/A	#									
	1997	#N/A	#N/A	#N/A	#									
	1998	#N/A	#N/A	#N/A	#.									
79	1999	#N/A	#N/A	₩NIA	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	₩N/A	#N/A	#N/A	#
Historical	2000	#N/A	#N/A	#N/A	#									
ž,	2001	1,374	1,234	1,249	1,173	1,200	1,347	1,411	1,477	1,174	1,286	1,325	1,392	15,
Ĩ	2002	1,383	1,199	1,330	1,245	1,230	1,425	1,716	1,510	1,386	1,392	1,491	1,458	16.
	2003	1,499	1,346	1,380	1,303	1,334	1,427	1,622	1,561	1,401	1,454	1,403	1,561	17,
	2004	1,509	1,354	1,405	1,284	1,318	1,411	1,576	1,479	1,467	1,449	1,563	1,609	17.4
	2005	1,540	1,336	1,467	1,319	1,354	1.582	1,668	1,601	1,463	1,503	1,509	1,532	17.
	2006	1,557	1,379	1,455	1,348	1,372	1,533	1,703	1,627	1,467	1,509	1,554	1,610	18,
	2007	1,585	1,405	1,482	1,373	1,397	1,561	1,734	1,657	1,493	1,537	1,582	1,639	18,
	2008	1,617	1,432	1,511	1,400	1,424	1,592	1,769	1,690	1,523	1,567	1,614	1,672	18,
E	2009	1,647	1,459	1,539	1,425	1,450	1,621	1,801	1,721	1,551	1,596	1,643	1,702	19,
Projected	2010	1,680	1,489	1,571	1,455	1,480	1,654	1,838	1,756	1,583	1,629	1,677	1,737	19,
ğ	2011	1,715	1 519	1,603	1,484	1,510	1,688	1,876	1,792	1,615	1,662	1,711	1,772	19,
ď	2012	1,750	1,551	1,636	1,515	1,542	1,723	1,915	1,829	1,649	1,697	1,747	1,809	20,
	2013	1 786	1 582	1 670	1 546	1,573	1,759	1,954	1,867	1,682	1,731	1,783	1,846	20,
	2014	1,826	1,617	1,706	1,680	1,608	1,797	1,997	1,908	1,719	1,770	1,822	1,887	21,
	2015	1,865	1,652	1,743	1,615	1,643	1,836	2,040	1,949	1,757	808, 6	1,861	1,928	21,
	2016	1,905	1,688	1,781	1,649	1,678	1,876	2,084	1,991	1,794	1,847	1,901	1.969	22,
	2017	1,944	1,723	1,818	1,683	1,713	1,914	2,127	2,032	1,831	1,885	1,941	2,010	22,
	2018	1,984	1,758	1,855	1,718	1,748	1.954	2,171	2,074	1,869	1,923	1,981	2,051	23,
72	2019	2,025	1,794	1,893	1,753	1,784	1,994	2,215	2,117	1,907	1,963	2,021	2,094	23,
Projected	5050	2,067	1,831	1,932	1,789	1,821	2,035	2,261	2,160	1,947	2,004	2,063	2,137	24,
Ğ	2021	2,110	1,869	1,973	1,827	1,859	2,078	2,309	2,206	1,988	2,046	2,106	2,182	24,
ō.	2022	2,155	1,909	2,014	1,865	1,898	2,121	2,357	2,252	2,029	2,088	2,150	2,227	25,
	2023	2,200	1,949	2,056	1,904	1,938	2,166	2,406	2,299	2,072	2,132	2,195	2,274	25,
	2024	2,246	1,989	2,099	1 944	1,978	2,211	2,457	2,347	2,115	2,177	2,241	2,321	26,
	2025	2,292	2.031	2,143	1,985	2,019	2,257	2,508	2,396	2,159	2,222	2,288	2,370	26,

	Year	Jan	Feb	Mar	Apr	May	Jun	վսե	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
ī	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
뀵	2001	8 8%	79%	B 0%	7 5%	77%	8 G%	9 0%	9 4%	7 5%	8 2%	8 5%	8 9%	100
至	2002	8 3%	7 2%	7 9%	7 4%	7 3%	8 5%	10 2%	9 0%	8 3%	8 3%	8 9%	8 7%	100
	2003	87%	78%	8 0%	7 5%	7 7%	83%	9 4%	9 0%	B 1%	8 4%	B 1%	9 0%	100
	2004	B 7%	7.8%	81%	7 4%	76%	B 1%	9 0%	8 5%	8 4%	8 3%	9 0%	9 2%	100
	2005	B 6%	7 5%	8 2%	7 4%_	7 6%	8 9%	9 3%	9 0%	B 2%	8 4%	8 4%	8 6%	100
	2006	8 6%	7 5%	8 0%	7 4%	7 6%	8 5%	9 4%	9 0%	8 1%	8 3%	8 5%	8 9%	100
	2007	8 6%	7 6%	8 0%	7 4%	7 6%	8 5%	9 4%	9 0%	8 1%	B 3%	8 6%	8 9%	100
	2008	8 6%	7 6%	8 0%	7 4%	76%	8 5%	9 4%	9 0%	B 1%	8 3%	8 6%	8 9%	100
13	2009	8 6%	76%	80%	7 4%	7 6%	8 5%	9 4%	9 0%	8 1%	8 3%	86%	8 9%	100
5	2010	8 6%	7 6%	8 0%	7 4%	76%	8 5%	9 4%	9 0%	8 1%	8 3%	8 6%	8 9%	100
Projected	2011	8 6%	76%	8 0%	7 4%	7 6%	8 5%	9 4%	9 0%	8 1%	8 3%	8 6%	8 9%	100
ď	2012	8 6%	7 6%	8 0%	7 4%	7 6%	8 5%	9 4%	9 0%	8 1%	8 3%	86%	8 9%	100
	2013	B 6%	76%	8 0%	7 4%	7 6%	B 5%	9 4%	9 0%	8 1%	B 3%	86%	8 9%	100
	2014	8 6%	7 6%	8 0%	7 4%	76%	8 5%	9 4%	9 0%	8 1%	8 3%	86%	8 9%	100
	2015	8 6%	7 6%	8 0%	7 4%	7 6%	8 5%	9 4%	9 0%	8 1%	8 3%	8 6%	8 9%	100
Avg.	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
Æ	2006-2015	8 6%	7 6%	8 0%	7 4%_	7 6%	8 5%	9 4%	9 0%	8 1%	8 3%	8 6%	8 9%	100

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Kenyon Monthly Non-Coincident Peak Demand (MW)

					_				_	_	_		_	
-	Year	<u>Jan</u>	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	+#N/A	#N/A	#N/A	#N/A	#N/A
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ē	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Histoncal	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	39	37	3 1	3 1	30	30	#N/A
Ī	2002	26	24	25	25	28	34	37	3 1	3 4	27	27	26	30
	2003	26	26	25	25	25	32	35	37	3 1	28	27	27	27
	2004	30	28	28	27	29	37	38	37	34	3 1	3 2	32	30
	2005	30	28	2.8	2.8	29	36	37	4 1	37	31	30	3.0	32
	2006	32	30	30	29	30	38	42	3 9	38	3 3	3 3	. 32	32
	2007	32	31	30	29	31	39	43	40	39	33	33	33	33
	2008	33	32	31	30	32	40	44	41	40	3 4	3 4	33	33
7	2009	34	32	32	30	32	4 0	45	42	40	3 4	3 5	34	3 4
Projected	2010	34	33	32	3 1	33	41	46	43	41	3 5	36	35	35
ř	2011	35	33	33	32	34	42	47	43	42	36	36	35	36
ᇫ	2012	36	34	34	32	34	43	4 B	44	43	37	37	36	36
	2013	36	35	34	33	35	44	49	45	44	37	38	37	37
	2014	37	36	35	34	36	45	50	46	4.5	38	3 9	38	38
	2015	38	36	36	35	36	46	5 1	47	46	3 9	39	8 E	3 9
	2016	3 9	37	37	35	37	47	5 2	48	47	40	40	39	3 9
	2017	40	38	37	36	3 B	48	53	49	4 B	4 1	41	40	4 0
	2018	40	39	38	37	39	4 9	54	5.0	49	42	42	41	41
몆	2019	41	39	39	38	40	50	55	5 1	5 O	42	43	42	42
Projected	2020	42	40	40	38	40	5 1	56	52	5 1	43	4 4	42	43
충	2021	43	41	40	39	41	52	57	53	52	4 4	4 5	43	44
ď	2022	44	42	4 1	40	42	53	59	5 5	53	4 5	46	44	4 5
	2023	45	43	42	4 1	43	5 4	60	56	54	46	47	4 5	46
•	2024	46	44	43	42	44	55	61	57	5 5	47	47	46	47
	2025	47	45	4 4	42	45	56	62	5 B	56	48	4.8	47	47

1996 1997						Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
1997													
1998													
1999													
2000													
2001							48 6%	54 3%	53 2%	56 4%	61.6%	63 1%	
2002	72 0%	72 9%	70 5%	69 3%	59 0%	58 8%	62 3%	66 2%	56 0%	69 8%	76 4%	74 8%	64 0%
2003	78 1%	78 5%	72 9%	73 6%	71 0%	62 7%	62 6%	56 7%	61 9%	70 3%	71 8%	78 1%	72 8%
2004	67 2%	68 8%	67 8%	66 4%	60 6%	53 5%	55 7%	54 1%	59 1%	63 2%	68 6%		65 9%
2005	68 8%	71 0%	69 6%	65 5%	63 1%	61 7%	60 9%	52 5%	55 4%	64 6%	71 0%	68 6%	62 8%
2006	66 0%	67 5%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 7%	67 8%	65 2%
2007	66 0%	67 6%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 6%	67 7%	64 1%
2008	66 0%	65 3%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 7%	67 8%	64 1%
2009	66 0%	67 6%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 6%	67 6%	64 1%
2010	68 0%	67 6%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 6%	67.6%	64 1%
2011	66 0%	67 6%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	52 3%	65 6%	67 6%	64 1%
2012	66 0%	65 3%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 6%	67 6%	64 1%
2013	66 0%	67 6%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 5%	67 5%	64 1%
2014	66 0%	67 6%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 5%	67.6%	64 1%
2015	66 0%	67 8%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%	65 5%		64 1%
6-2005	71 5%	72 8%	70 2%	68 7%	63 4%	59 2%	58 1%	56 8%	57 1%	64 9%			66 4%
06-2015	66 0%	67 1%	65 5%	64 9%	60 6%	55 6%	54 1%	55 4%	53 2%	62 3%			64 2%
	998 999 9000 0001 0001 0002 0003 0004 0005 0006 0007 0008 0009 0010 0011 0012 0011 0012 0014 0014 0015	998 999	998 999 1000 10001 10002 72 0% 72 9% 72 9% 78 1% 78 5% 10004 67 2% 68 8% 71 0% 10005 66 0% 67 6% 10006 66 0% 67 6% 10009 66 0% 67 6% 10009 66 0% 67 6% 10010 68 0% 67 6% 10011 68 0% 67 6% 10011 68 0% 67 6% 10012 66 0% 67 6% 10013 66 0% 67 6% 10014 66 0% 67 6% 10015 66 0% 67 6% 10016 68 0% 67 6% 10016 68 0% 67 6% 10017 68 0% 67 6% 10018	998 999 1000 10001 10002 72 0% 72 9% 70 5% 10003 78 1% 78 5% 72 9% 10004 67 2% 68 8% 71 0% 69 6% 10005 68 8% 71 0% 69 6% 10005 66 0% 67 6% 65 5% 10009 66 0% 67 6% 65 5% 10009 66 0% 67 6% 65 5% 10010 68 0% 67 6% 65 5% 10011 68 0% 67 6% 65 5% 10011 68 0% 67 6% 65 5% 10011 68 0% 67 6% 65 5% 10012 68 0% 67 6% 65 5% 10013 68 0% 67 6% 65 5% 10014 68 0% 67 6% 65 5% 10015 68 0% 67 6% 65 5% 10014 68 0% 67 6% 65 5% 10015 68 0% 67 6% 65 5% 10014 68 0% 67 6% 65 5% 10015 68 0% 67 6% 65 5% 10015 68 0% 67 6% 65 5% 10016 68 0% 67 6% 65 5% 10017 68 0% 67 6% 65 5% 10018 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 67 6% 65 5% 10019 68 0% 10019	998 999 1000 10001 10002 72 0% 72 9% 70 5% 69 3% 10003 78 1% 78 5% 72 9% 73 6% 10004 67 2% 68 8% 67 67 6% 65 64 % 10005 68 8% 71 0% 69 6% 65 5% 10006 66 0% 67 6% 65 5% 64 9% 10009 66 0% 67 6% 65 5% 64 9% 10009 66 0% 67 6% 65 5% 64 9% 10010 68 0% 67 6% 65 5% 64 9% 10011 68 0% 67 6% 65 5% 64 9% 10011 68 0% 67 6% 65 5% 64 9% 10012 66 0% 67 6% 65 5% 64 9% 10013 66 0% 67 6% 65 5% 64 9% 10014 66 0% 67 6% 65 5% 64 9% 10015 66 0% 67 6% 65 5% 64 9% 10016 68 0% 67 6% 65 5% 64 9% 10017 68 0% 67 6% 65 5% 64 9% 10018 68 0% 67 6% 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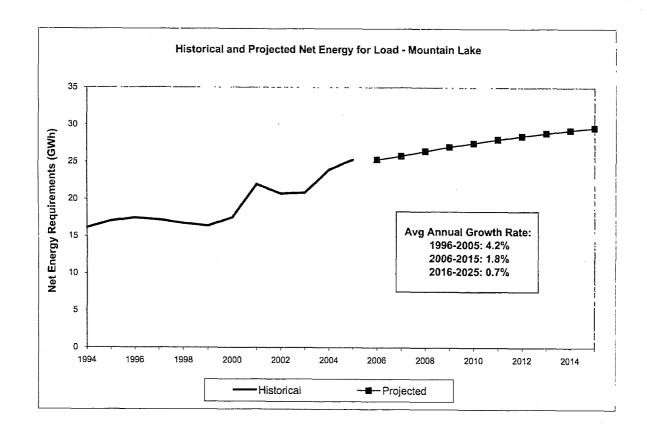
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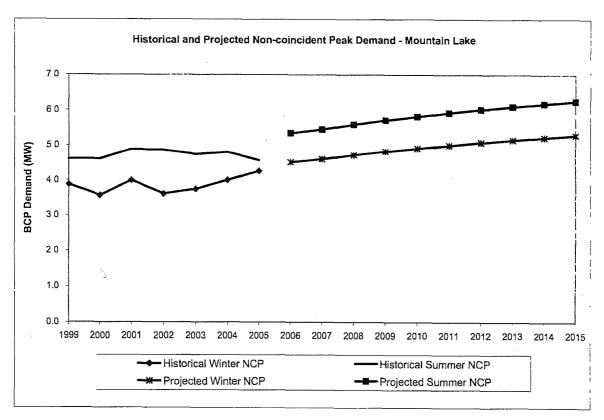
Kenyon Monthly Coincident-Peak Demand (MW)

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
-	2006	29	28	29	28	28	36	3.8	38	36	29	29	29	29
	2007	29	29	29	28	29	37	3 9	39	37	30	29	29	29
	2008	30	29	30	29	30	38	4 0	40	38	3 0	3 0	30	30
E.	2009	30	30	3 D	30	30	38	4 0	40	38	31	30	30	30
혍	2010	31	30	31	30	31	3 9	41	4 1	39	3 2	3 1	3 1	3 1
Projected	2011	32	3 1	32	31	31	4 D	42	42	40	3 2	31	32	32
'nΞ	2012	3 2	32	32	3 1	32	41	43	43	41	33	32	3 2	32
	2013	33	32	33	3 2	33	41	44	44	42	33	33	33	33
	2014	34	33	3 4	33	33	4 2	45	4 5	43	3 4	3.4	3 4	34
	2015	3 4	34	34	3 3	3.4	43	4.6	4.6	44	35	34	3 4	3 4
	2016	3.5	3 5	35	3 4	3 5	44	47	47	4 4	36	3 5	3 5	3 5
	2017	36	35	36	35	36	45	48	48	45	36	36	36	36
	2018	37	36	37	36	36	45	48	49	46	37	36	37	3 7
교	2019	37	37	37	36	37	47	4 9	50	47	38	37	37	3 7
Projected	2020	38	37	38	37	38	48	51	51	48	39	38	38	38
충	2021	3 9	38	39	38	39	4 9	5 2	5 2	49	40	3 9	39	3 9
ď.	2022	40	39	40	39	39	50	53	53	50	40	40	4 0	4 0
	2023	41	4 D	41	39	40	5 1	5 4	5 4	51	4 1	40	4 1	4 1
	2024	4 1	4 1	4 1	4 0	4 1	52	5 5	55	52	4 2	4 1	4 1	4 1
	2025	42	4 2	4 2	4 1	42	53	5.6	56	53	4 3	4 2	4 2	4 2

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	90 5%
	2007	90 5%	93 0%	96 D%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
	2008	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
72	2009	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
疲	2010	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
Ť	2011	90 5%	93 0%	96 D%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
ď	2012	90 5%	93 0%	96 O%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
	2013	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
	2014	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
	2015	90 5%	93 0%	96 0%	96 9%	93 5%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 0%
	2006-2015	90 5%	93 0%	96 0%	96 9%	93 0%	94 5%	90 0%	96 8%	94 9%	89 6%	86 9%	89 8%	89 2%

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Mountain Lake
Historical and Projected Net Energy Requirement's and Peak Demand

			Net Energ	y Requireme	ents (CY)			Non-	Coinciden	t Peak Dem	and		c
		Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	17,458	-	17,516	N	0.3%	3.2	, n	61.6%	3.8		51 8%	#N/
	1997	17,191	-1 5%	17,243	-1.6%	03%	34	5.1%	57.7%	3 2	-16 8%	61 3%	#N/
	1998	16,734	-2.7%	16,700	-3.1%	-0 2%	3.6	5.6%	53 2%	4 3	33.3%	44 8%	#N/
70	1999	16,393	-2.0%	16,356	-2.1%	-0 2%	3.9	8 0%	48 3%	4 6	8.0%	40 6%	#N/
Historical	2000	17,517	6.9%	17,514	7.1%	0 0%	36	-8 0%	56.1%	4.6	0.0%	43 4%	#N/
isto	2001	21,991	25 5%	21,825	24 6%	-0 8%	4.0	12 2%	62 8%	4 9	6 0%	51.4%	#N/
Ī	2002	20,752	-5 6%	20,550	-5.8%	-1 0%	3 6	-9 8%	65 6%	4.9	-0.4%	48 7%	#N/
	2003	20,866	0 5%	20,739	0 9%	-0.6%	3 7	38%	63.6%	4.7	-2 5%	50.3%	#N/
	2004	23,939	14.7%	24,038	15 9%	0 4%	4 0	7 0%	68.2%	4.8	1 3%	56 9%	#N/
_	2005	25,312	5.7%	25,053	4,2%	-1 0%	4,3	6.5%	67 7%	46	-4.7%	63 1%	#N/
	2006	25,312	0.0%	25,312	1 0%		4.5	5 9%	63 9%	5.3	16.8%	54 1%	4 :
	2007	25,806	2 0%	25,806	2.0%		4.6	20%	63 9%	55	2 0%	54 1%	4
	2008	26,455	2.5%	26,455	2.5%		4.7	2 5%	63.9%	56	2.5%	54 1%	4 !
	2009	27,055	2.3%	27,055	23%		48	2 3%	63.9%	57	2 3%	54 1%	4 (
	2010	27,550	1 8%	27,550	1.8%		4 9	18%	63 9%	5.8	18%	54 1%	4.7
	2011	28,042	1 8%	28,042	18%		50	1.8%	63 9%	5.9	18%	54 1%	4 7
	2012	28,499	1 6%	28,499	16%		5 1	1.6%	63.9%	6.0	16%	54.1%	4 8
	2013	28,903	1.4%	28,903	1 4%		5.2	1 4%	63.9%	61	1.4%	54 1%	4 9
Ä	2014	29,272	1.3%	29,272	1.3%		5 2	1.3%	63 9%	62	1 3%	54 1%	4 9
Projected	2015	29,611	1 2%	29,611	1 2%		53	1 2%	63 9%	63	1 2%	54 1%	5 (
ġ.	2016	29,922	1.0%	29,922	1 0%		5 3	1 0%	63 9%	6.3	1 0%	54.1%	5
₫.	2017	30,266	1.1%	30,266	11%		5 4	1.1%	63.9%	6.4	1 1%	54 1%	5
	2018	30,553	0.9%	30,553	0.9%		5.5	0 9%	63 9%	6 5	0 9%	54 1%	5 :
	2019	30,756	0 7%	30,756	0.7%		5 5	07%	63 9%	65	0.7%	54 1%	5 :
	2020	30,935	0.6%	30,935	0.6%		5 5	06%	63 9%	6,5	0 6%	54.1%	5 :
	2021	31,081	0 5%	31,081	0.5%		5 5	0 5%	63 9%	6 6	0 5%	54.1%	5.3
	2022	31,255	0.6%	31,255	0 6%		56	0.6%	63 9%	6 6	0 6%	54.1%	5
	2023	31,450	0 6%	31,450	0 6%		56	0.6%	63.9%	6.6	0 6%	54 1%	5
	2024	31,607	0.5%	31,607	0 5%		5.6	0 5%	63 9%	67	0 5%	54.1%	5
	2025	31,763	0 5%	31,763	_ 0.5%		5.7	0 5%	63.9%	6 7	0.5%	54 1%	5
Ď.	Thru 2005		4 2%		4 1%			3 1%	60 5%		2 0%	51.2%	
AAGR	2006-2015		1 8%	1	18%			1 8%	63.9%		1 8%	54 1%	
⋖	2016-2025		0.7%)	0.7%			0.7%	63.9%		0.7%	54 1%	

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Mountain Lake Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb_	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Νον	Dec	CY Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NIA	#N/
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NIA	A/N#	#NIA	#N/
댵.	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NIA	#N/
Historical	2001	#N/A	#N/A	#N/A	∜NIA	#N/A	#N/							
Ŧ	2002	1,718	1,493	1,699	1,577	1,606	1,832	2,190	1,864	1,648	1,693	1,694	1,738	20,75
	2003	1,849	1,645	1,668	1,563	1,562	1,686	2,006	2,023	1,646	1,709	1,680	1,828	20,86
	2004	2,182	1,942	1,946	1,804	1,855	1,902	2,210	2,021	1,928	1,965	1,923	2,262	23,93
_	2005	2,393	1,967	2,113	1,872	1,925	2,174	2,421	2,234	1,979	2,000	2,003	2,231	25,31
	2006	2,260	1,959	2,067	1,900	1,935	2,116	2,465	2,275	2,006	2,054	2,035	2,240	25,31
	2007	2,304	1,997	2,107	1,937	1,973	2,157	2,513	2,319	2,046	2,094	2,075	2,284	25,80
	2008	2,362	2,047	2,160	1,986	2,022	2,212	2,577	2,377	2,097	2,147	2,127	2,341	26,45
70	2009	2,415	2,094	2,209	2,031	2,068	2,262	2,635	2,431	2,145	2,195	2,175	2,394	27,05
Projected	2010	2,459	2,132	2,249	2,068	2,106	2,303	2,683	2,476	2,184	2,235	2,215	2,438	27,55
ĕ	2011	2,503	2,170	2,290	2,105	2,144	2,344	2,731	2,520	2,223	2,275	2,255	2,482	28,04
à	2012	2,544	2,206	2,327	2,139	2,178	2,383	2,776	2,561	2,259	2,312	2,292	2,522	28,49
	2013	2,580	2,237	2,360	2,169	2,209	2,416	2,815	2,597	2,291	2,345	2,324	2,558	28,90
	2014 .	2,613	2,265	2,390	. 2,197	2,238	2,447	2,851	2,631	2,320	2,375	2,354	2,591	29,27
	2015	2,643	2,292	2,418	2,223	2,264	2,476	2,884	2,661	2,347	2,403	2,381	2,621	29,61
	2016	2,671	2,316	2,443	2,246	2,287	2,502	2,914	2,689	2,372	2,428	2,406	2,548	29,92
	2017	2,702	2,342	2,471	2,272	2,314	2,530	2,948	2,720	2,399	2,456	2,434	2,679	30,26
	2018	2,727	2,365	2,495	2,293	2,336	2,554	2,976	2,746	2,422	2,479	2,457	2,704	30,55
70	2019	2,746	2,380	2,511	2,308	2,351	2,571	2,996	2,764	2,43B	2,496	2,473	2,722	30,75
Projected	2020	2,762	2,394	2,526	2,322	2,365	2,586	E10,E	2,780	2,452	2,510	2,487	2,738	30,93
풉	2021	2,775	2,405	2,538	2,333	2,376	2,598	3,027	2,793	2,464	2,522	2,499	2,751	31,08
ď	2022	2,790	2,419	2,552	2,346	2,389	2,613	3,044	2,809	2,477	2,536	2,513	2,766	31,25
	2023	2,808	2,434	2,568	2,361	2,404	2,629	3,063	2,826	2,493	2,552	2,529	2,783	31,45
	2024	2,822	2,446	2,581	2,372	2,416	2,642	3,078	2,840	2,505	2,565	2,541	2,797	31,60
	2025	2,835	2,458	2,593	2,384	2,428	2,656	3,094	2,854	2,518	2,577	2,554	2,811	31,76

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	INIA	AINIA	#NI
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NJ
	1998 .	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/A	#N/A	#N/A	#N/A	#N/A	#NIA	#N/A	#Ni
<u></u>	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
윤	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#NI
Historical	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#Ni
Ï	2002	8 3%	7 2%	8 2%	7 6%	77%	8 8%	10 6%	9 0%	7 9%	8 2%	8 2%	8 4%	100 0
	2003	8 9%	7 9%	8 0%	7 5%	7 5%	B 1%	96%	9 7%	7 9%	8 2%	B 1%	88%	100 0
	2004	9 1%	8 1%	8 1%	7 5%	7 7%	7 9%	9 2%	8 4%	8 1%	8 2%	8 0%	9 4%	100 0
	2005	9 5%	7 8%	8 3%	7 4%	7 6%	86%	96%	88%	7 8%	7 9%	7 9%	8 8%	100 0
	2008	8 9%	77%	8 2%	7 5%	7 6%	B 4%	97%	9 0%	7 9%	8 1%	8 0%	8 9%	100 0
	2007	8 9%	77%	8 2%	7 5%	7 6%	8 4%	97%	9 0%	7 9%	8 1%	8 0%	8 9%	100 0
	2008	8 9%	7 7%	8 2%	7 5%	7 6%	8 4%	97%	9 0%	7 9%	8 1%	8 0%	8 9%	100 0
70	2009	8 9%	77%	8 2%	7 5%	7 8%	B 4%	97%	9 0%	7 9%	8 1%	8 0%	89%	100 0
ŧ	2010	8 9%	77%	8 2%	7 5%	7 6%	8 4%	97%	9 0%	7 9%	8 1%	8 0%	B 9%	100 0
rojected	2011	8 9%	7 7%	8 2%	7 5%	7 6%	84%	9 7%	9 0%	7 9%	B 1%	8 0%	89%	100 0
ă.	2012	8 9%	77%	8 2%	7 5%	7 6%	84%	9 7%	9 0%	7 9%	8 1%	8 0%	89%	100 0
	2013	B 9%	77%	B 2%	7 5%	7 6%	B 4%	97%	9 0%	7 9%	B 1%	8 0%	89%	100 0
	2014	8 9%	77%	8 2%	7 5%	7 6%	8 4%	97%	9 0%	7 9%	8 1%	8 0%	8 9%	100 0
	2015	8 9%	7.7%	B 2%	7 5%	7 6%	8 4%	97%	9 0%	7 9%	8 1%	_ 8 0%	8 9%	100 0
,	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
Avg	2006-2015	8.9%	77%	8 2%	7 5%	7 6%	B 4%	97%	9 0%	7 9%	B 1%	8 0%	8 9%	100 0

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Mountain Lake Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	AINI\$	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
불	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2001	#N/A	#N/A	#N/A	#N/A	#N/A	46	47	4 9	39	3 2	35	36	#N/A
፰	2002	35	3 4	34	33	37	48	49	44	42	34	3 4	36	36
	2003	37	37	35	34	32	42	45	47	39	3 4	3 5	36	37
	2004	40	37	3 5	33	33	42	48	4.4	43	3 5	36	43	40
_	2005	4 0	3.8	3 7	33	34	46	46	46	39	36	37	3 9	43
	2006	4 5	4 2	4 0	37	38	4 9	- 53	51	4.5	40	42	44	4 5
	2007	46	43	4 1	38	39	50	55	52	46	41	43	4.5	46
	2008	47	4 4	42	39	40	5 1	56	54	47	42	4.4	4.6	47
핂	2008	48	4 5	43	39	41	52	57	5.5	49	43	4.4	47	4.8
Projected	2010	4 9	46	4 4	40	42	53	58	56	49	44	4 5	48	49
Ğ	2011	50	46	4 5	41	42	54	59	57	5 0	44	46	4 9	5.0
Ľ.	2012	5 1	47	45	42	43	55	60	58	5 1	4.5	47	49	5 1
•	2013	52	48	46	42	4 4	56	6 1	59	52	46	47	50	5 2
	2014	5 2	48	47	43	4.4	57	62	59	53	46	48	5 1	5 2
_	2015	53	49	47	43	45	57	6.3	60	53	47	48	5 1	53
	2016	53	50	48	44	45	58	63	6 1	54	47	49	5 2	53
	2017	54	50	4 B	44	46	59	6 4	6 1	5 4	48	49	5 2	5.4
	2018	55	51	49	45	46	59	6.5	62	55	48	50	53	5.5
	2019	5 5	51	49	45	46	60	6 5	62	5.5	49	50	53	5 5
톂	2020	55	51	49	4 5	47	6 O	6.5	63	56	49	50	53	5.5
Projected	2021	55	5 1	49	45	47	6 O	66	63	56	49	50	53	5 5
ď.	2022 .	56	5 2	50	46	47	6 1	6.6	63	5 6	49	51	54	56
	2023	56	52	50	46	47	6 1	6 6	64	56	5 D	51	54	56
	2024	56	5 2	50	46	48	6 1	67	6 4	57	50	51	54	56
_	2025	57	53	50	46	48	6 2	67	6.4	57	50	51	55	57
•														

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996													
	1997													
	1998													
<u>16</u>	1999		•											
Historical	200D													
ş	2001													
王	2002	55 4%	65 0%	66 3%	65 5%	58 0%	53 5%	60 5%	56 5%	54 5%	66 0%	69 0%	65 1%	65 6%
	2003	66 4%	65 8%	64 1%	64 4%	66 2%	56 4%	59 6%	57 4%	59 3%	67 7%	66 5%	67 4%	63 6%
	2004	73 2%	74 5%	75 2%	77 0%	75 9%	62 9%	61 8%	62 1%	62 B%	75 4%	73 8%	71 2%	68 2%
	2005	79 5%	76 7%	77 4%	78 0%	75 4%	66 3%	71 1%	65 6%	70 8%	74 8%	74 3%	76 9%	67 7%
	2006	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	61 3%	69 0%	67 9%	68 3%	63 9%
	2007	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	613%	69 0%	67 6%	67 9%	63 9%
	2008	67 2%	67 2%	B9 0%	71 5%	68 2%	59 9%	62 0%	59 5%	61 3%	69 0%	67 7%	68 1%	63 9%
먊	2009	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	61 3%	69 0%	68 0%	68 4%	63 9%
Projected	2010	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	61 3%	69 0%	68 1%	68 4%	63 9%
ē	2011	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	61 3%	69 0%	68 2%	68 5%	63 9%
₫.	2012	67 2%	67 2%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	613%	69 0%	68 3%	68 7%	63 9%
	2013	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	613%	69 0%	68 4%	68 8%	63 9%
	2014	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	613%	69 0%	68 5%	68 8%	63 9%
	2015	67 2%	69 6%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	61 3%	69 0%	68 6%	68 9%	63 9%
Avg.	1996-2005	71 1%	70 5%	70 7%	71 2%	68 9%	59 8%	63 3%	60 4%	61 8%	71 0%	70 9%	70 2%	66 3%
É	2006-2015	67.2%	69 1%	69 0%	71 5%	68 2%	59 9%	62 0%	59 5%	613%	69 0%	68 1%	68 5%	63 9%

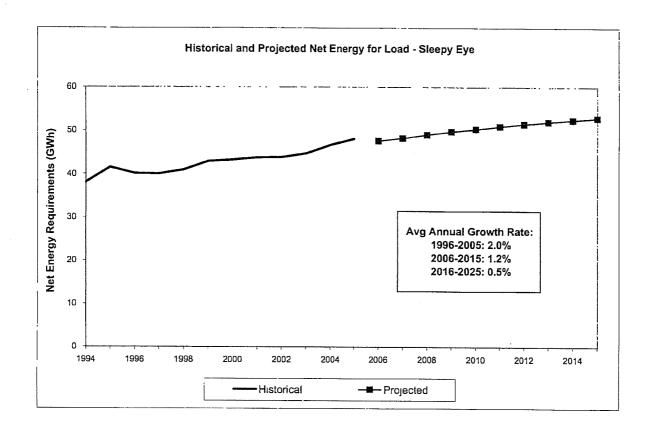
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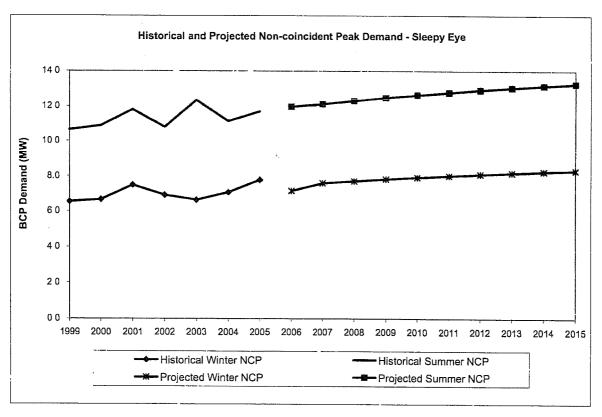
Mountain Lake Monthly Coincident-Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk \$
	2006	4 3	40	38	3 5	37	47	5 1	50	4 4	38	40	43	43
	2007	44	41	38	36	37	48	52	51	4 5	39	4 1	44	4.4
	2008	45	42	39	37	3 B	49	54	5 2	4 6	40	42	45	4 5
귷	2009	46	· 43	40	38	39	50	55	53	47	4 1	42	46	46
턽	2010	47	44	41	39	4 D	51	56	54	4 B	4 2	43	47	47
Projected	2011	47	45	42	39	4 1	52	57	5 5	49	42	44	47	47
ñ.	2012	48	45	42	40	4 1	53	58	56	50	43	44	48	48
	2013	49	46	43	41	42	54	59	57	50	4 4	4 5	49	49
	2014	49	47	43	41	42	55	60	57	51	4 4	45	49	49
	2015	50	47	44	42	43	55	60	58	5 2	4.5	46	50	50
	2016	51	4 B	44	42	43	56	61	59	52	4 5	47	50	5 1
	2017	51	4 B	45	42	4 4	56 .	62	59	53	46	47	5 1	5 1
	2018	52	49	4 5	43	4 4	57	62	60	53	46	47	51	52
72	2019	52	49	46	43	4 5	57	63	60	5 4	47	4 B	52	52
ected	2020	52	49	46	43	45	58	63	61	54	4.7	48	52	5.2
ř	2021	52	49	46	4.4	45	58	63	61	5 4	47	48	52	52
ᇫ	2022	53	50	46	44	4 5	58	64	61	5 4	47	48	52	53
	2023	53	50	47	44	46	59	64	62	5 5	48	49	53	53
	2024	53	50	47	44	46	59	64	6.2	55	48	49	53	53
_	2025	5 4	5 1	47	4 5	46	59	6.5	62	5 5	48	49	53	54

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk S
	2006	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
	2007	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
	2008	94 6%	96 1%	93 4%	95 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
g	2009	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
ថ្ង	2010	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
ĕ	2011	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
ŭ	2012	94 6%	95 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
	2013	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
	2014	94 6%	95 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
	2015	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%
	2006-2015	94 6%	96 1%	93 4%	96 2%	96 1%	96 3%	96 3%	96 6%	97 0%	95 8%	95 3%	97 5%	94 6%

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Sleepy Eye Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	gy Requireme	ents (CY)			Non-	Coinciden	ıt Peak Dem	and		С
	•	Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	40,162	-	40,132		-0 1%	7.3	-	62 8%	9.7	•	47 3%	#N//
	1997	40,051	-0.3%	40,315	0.5%	0.7%	63	-13.2%	72 2%	10.0	2 9%	45 8%	#N/A
	1998	40,988	2 3%	41,558	3 1%	1 4%	68	7 2%	68 9%	10.3	3 0%	45 5%	#N/A
त्त्	1999	42,949	4 8%	43,341	4.3%	0 9%	6 5	-3 6%	74 9%	10.6	3 5%	46 1%	#N/A
Historical	2000	43,274	0.8%	43,549	0 5%	0.6%	6.7	1.8%	74 2%	109	2 1%	45 5%	#N/A
<u>ist</u>	2001	43,807	1.2%	43,398	-0 3%	-0.9%	7.5	12.5%	66.7%	11.8	8 6%	42 4%	#N/A
I	2002	43,876	0.2%	43,034	-0.8%	-1 9%	69	-7 8%	72 5%	10.8	-8 6%	46 4%	#N/A
	2003	44,750	2.0%	44,261	2 9%	-1.1%	66	-4 0%	77 0%	12.3	14 4%	41 4%	#N/A
	2004	46,712	4.4%	47,636	7 6%	2 0%	7.1	6.7%	75.4%	11 1	-9.8%	47 9%	#N/A
_	2005	48,119	3 0%	47,433	-0.4%	-1 4%	78	10 0%	70 6%	11 7	5.0%	47 0%	#N/A
	2006	47,653	-1.0%	47,653	0 5%		7 2	-8.1%	76 0%	12 0	2 3%	45 5%	6 6
	2007	48,266	1 3%	48,266	1 3%		7.6	6.2%	72.5%	12 1	1.3%	45 5%	67
	2008	49,040	1 6%	49,040	1.6%		77	1 6%	72.5%	123	1 6%	45 5%	68
	2009	49,763	1.5%	49,763	1 5%		7 8	1 5%	72 5%	12 5	1.5%	45,5%	6 9
	2010	50,365	1.2%	50,365	1 2%		79	1 2%	72 5%	12,6	1.2%	45.5%	7 0
	2011	50,959	1 2%	50,959	1 2%		0.8	1 2%	72 5%	128	1 2%	45 5%	7 0
	2012	51,509	1.1%	51,509	1 1%		8 1	1.1%	72.5%	129	1 1%	45 5%	, 71
	2013	51,996	0 9%	51,996	0 9%		82	0.9%	72.5%	13.0	0.9%	45 5%	7 2
þ	2014	52,458	. 0.9%	52,458	, 0.9%		83	0 9%	72 5%	13 2	0.9%	45.5%	73
Projected	2015	52,891	0.8%	52,891	0.8%		B3	0 8%	72 5%	13 3	0.8%	45 5%	7 3
ē	2016	53,299	0.8%	53,299	08%		8 4	0 8%	72.5%	13.4	0.8%	45 5%	7 4
Δ	2017	53,733	0.8%	53,733	08%		8 5	0 8%	72.5%	13 5	0 8%	45 5%	7 4
	2018	54,095	0 7%	54,095	0.7%		8 5	0.7%	72.5%	13 6	0.7%	45.5%	7 5
	2019	54,370	0.5%	54,370	0 5%		86	0 5%	72.5%	13.6	0.5%	45.5%	7 5
	2020	54,625	0 5%	54,625	0.5%		86	0 5%	72.5%	137	0 5%	45.5%	7 6
	2021	54,850	0 4%	54,850	0.4%		8.6	0 4%	72 5%	13 8	0.4%	45 5%	7 6
	2022	55,108	0 5%	55,108	0.5%	•	8.7	0 5%	72.5%	13 8	0.5%	45 5%	7 6
	2023	55,384	0.5%	55,384	0.5%		87	0 5%	72 5%	13.9	0.5%	45.5%	77
	2024	55,613	0 4%	55,613	0.4%		88	0 4%	72.5%	·14 D	0 4%	45 5%	77
	2025	55,842	0 4%	55,842	0.4%		88	0 4%	72 5%	14 0	0 4%	45 5%	77
œ	Thru 2005		2 0%	1	1.9%			0.7%	71 5%		2.1%	45 5%	
AAGR	2006-2015		1 2%	1	1 2%			17%	72 9%		1.2%	45.5%	
∢	2016-2025		0 5%	,	0.5%			0 5%	72 5%		0 5%	45.5%	

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Sleepy Eye
Monthly Net Energy Requirements (MWh)

_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Tota
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1 :#1
75	1999 `	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	·#1
Ĕ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
Historical	2001	#N/A	. #N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
Ŧ	2002	3,094	2,741	3,022	2,843	3,081	3,984	5,088	4,983	4,518	3,685	3,442	3,394	43,8
	2003	3,423	3,063	3,242	2,825	2,738	3,660	4,892	5,406	4,514	3,822	3,538	3,627	44,7
	2004	3,525	3,019	2,560	2,944	3,383	3,865	4,999	4,714	5,220	4,547	3,804	4,132	46,7
_	2005	3,514	2,986	3,226	3,100	3,261	4,441	5,332	5,555	5,091	4,177	3,788	3,648	48,1
	2006	3,520	3,069	3,136	3,042	3,236	4,141	5,279	5,370	5,020	4,212	3,784	3,844	47,8
	2007	3,565	3,108	3,176	3,082	3,277	4,195	5,347	5,439	5,085	4,266	3,833	3,893	48,2
	200B	3,623	3,158	3,227	3,131	3,330	4,262	5,433	5,526	5,166	4,334	3,895	3,956	49,0
72	2009	3,676	3,205	3,274	3,177	3,379	4,325	5,513	5,607	5,243	4,398	3,952	4,014	49,7
Projected	2010	3,721	3,243	3,314	3,216	3,420	4,377	5,579	5,675	5,306	4,451	4,000	4,063	50,3
ᅙ	2011	3,764	3,282	3,353	3,254	3,460	4,429	5,645	5,742	5,369	4,504	4,047	4,111	50,9
ñ.	2012	3,805	3,317	3,389	3,289	3,497	4,477	5,706	5,804	5,427	4,552	4,091	4,155	51,5
	2013	3,841	3,348	3,421	3,320	3,530	4,519	5,760	5,859	5,478	4,595	4,129	4,194	51,9
	2014	3,875	3,378	3,452	3,349	3,562	4,559	5,811	5,911	5,527	4,636	4,166	4,232	52,4
	2015	3,907	3,406	3,480	3,377	3,591	4,597	5,859	5,960	5,572	4,675	4,200	4,267	52,8
	2015	3,937	3,432	3,507	3,403	3,619	4,632	5,904	6,006	5,615	4,711	4,233	4,300	53,2
	2017	3,969	3,460	3,536	3,431	3,648	4,670	5,952	6,055	5,661	4,749	4,267	4,334	53,7
	2018	3,996	3,484	3,559	3,454	3,673	4,701	5,993	6,096	5,699	4,781	4,296	4,364	54,0
멅	2019	4,016	3,501	3,577	3,471	3,692	4,725	6,023	6,125	5,728	4,805	4,318	4,386	54,3
ដូ	2020	4,035	3,518	3,594	3,488	3,709	4,747	6,051	6,165	5,755	4,828	4,338	4,406	54,6
Projected	2021	4,052	3,532	3,609	3,502	3,724	4,767	6,076	6,181	5,779	4,848	4,356	4,425	54,8
ō.	2022	4,071	3,549	3,626	3,518	3,742	4,789	6,105	6,210	5,806	4,871	4,376	4,445	55,1
	2023	4,091	3,567	3,644	3,536	3,761	4,813	6,135	6,241	5,835	4,895	4,398	4,468	55,3
	2024	4,108	3,581	3,659	3,551	3,776	4,833	6,161	6,267	5,859	4,915	4,417	4,486	55,6
_	2025	4,125	3,596	3,674	3,565	3,792	4,853	6,186	6,292	5,883	4,935	4,435	4,505	55,8

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
1997	#N/A	#N/A	#N/A	#N/A	#NIA	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
199B	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#1
2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	IIN/A	#N/A	#N/A	#N/A	#N/A		#1
2001	#N/A	#N/A	#N/A	#N/A	#NIA	#N/A	#N/A	#N/A	#N/A				1#
2002	7 1%	6 2%	6 9%	65%	7 0%	9 1%	11 6%	114%	10 3%	8 4%	7 8%		100
2003	7 6%	6 8%	7 2%	63%	6 1%	8 2%	10 9%	12 1%	10 1%				100
2004	7 5%	6 5%	5 5%	63%	7 2%	8 3%	10 7%	10 1%	11 2%				100
2005	7 3%	6 2%	67%	64%	6 8%	9 2%	11 1%	11 5%	10 6%	87%	7 9%	76%	100 (
2006	7 4%	6 4%	6 6%	64%	68%	B 7%	11 1%	11 3%	10 5%	8 8%	7 9%	8 1%	100 (
2007	7 4%	6 4%	66%	64%	68%	87%	11 1%	11 3%	10 5%	8 8%	7 9%	B 1%	100
2008	7 4%	6 4%	66%	64%	6 8%	87%	11 1%	113%	10 5%	8 8%	7 9%	8 1%	100
2009	7 4%	6 4%	66%	64%	6 8%	87%	11 1%	11 3%	10 5%	8 8%	7 9%		100
2010	7 4%	6 4%	6 6%	64%	6 8%	8 7%	11 1%	113%	10 5%	8 8%	7 9%		100
2011	7 4%	6 4%	66%	6 4%	6 8%	87%	11 1%	113%	10 5%	8 8%	7 9%		100
2012	7 4%	6 4%	6 6%	64%	6 8%	87%	11 1%	113%	10 5%	8 8%			100
2013	7 4%	6 4%	66%	64%	6 8%	B 7%	11 1%	11 3%	1D 5%				100
2014	7 4%	6 4%	6 6%	64%	68%	87%	11 1%	113%	10.5%				100
2015	7 4%	6 4%	6 6%	64%	68%	8 7%	11 1%	11 3%	10 5%	8.8%	7 9%		100
1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A				#/1
2006-2015	7 4%	64%	66%	64%	6 8%	87%	11 1%	11 3%	10 5%	8 8%	7 9%	8 1%	100 (
•	1998 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 1996-2005	1996 #N/A 1997 #N/A 1998 #N/A 1998 #N/A 1999 #N/A 2000 #N/A 2001 #N/A 2002 7 1% 2003 7 6% 2005 7 3% 2006 7 4% 2007 7 4% 2008 7 4% 2010 7 4% 2010 7 4% 2011 7 4% 2011 7 4% 2012 7 4% 2011 7 4%	1996 #N/A #N/A 1997 #N/A #N/A 1998 #N/A #N/A 1998 #N/A #N/A 1999 #N/A #N/A 2000 #N/A #N/A 2001 #N/A #N/A 2002 7 1% 6 2% 2003 7 6% 6 8% 2004 7 5% 6 5% 2005 7 3% 6 2% 2006 7 4% 6 4% 2007 7 4% 6 4% 2008 7 4% 6 4% 2010 7 4% 6 4% 2010 7 4% 6 4% 2011 7 4% 6 4% 2011 7 4% 6 4% 2011 7 4% 6 4% 2012 7 4% 6 4% 2013 7 4% 6 4% 2013 7 4% 6 4% 2014 7 4% 6 4% 2014 7 4% 6 4% 2015 7 4% 6 4% 2015 7 4% 6 4% 2016 7 4% 6 4% 2017 7 4% 6 4% 2018 7 4% 6 4% 2019 7 4% 6 4% 2019 7 4% 6 4% 2011 7 4% 6 4% 2011 7 4% 6 4% 2015 7 4% 6 4%	1996 #N/A #N/A #N/A #N/A 1997 #N/A #N/A #N/A #N/A 1998 #N/A #N/A #N/A #N/A 1999 #N/A #N/A #N/A 2000 #N/A #N/A #N/A 2000 #N/A #N/A #N/A 2001 #N/A #N/A #N/A 2002 7 1% 6 2% 6 9% 2003 7 6% 6 8% 7 2% 2004 7 5% 6 5% 5 5% 2005 7 3% 6 2% 6 7% 2006 7 4% 6 4% 6 6% 2007 7 4% 6 4% 6 6% 2009 7 4% 6 4% 6 6% 2010 7 4% 6 4% 6 6% 2010 7 4% 6 4% 6 6% 2011 7 4% 6 4% 6 6% 2012 7 4% 6 4% 6 6% 2013 7 4% 6 4% 6 6% 2014 7 4% 6 4% 6 6% 2014 7 4% 6 4% 6 6% 2015 7 4% 6 4% 6 6% 2016 7 4% 6 4% 6 6% 2017 7 4% 6 4% 6 6% 2018 7 4% 6 4% 6 6% 2019 7 4% 6 4% 6 6% 2011 7 4% 6 4% 6 6% 2011 7 4% 6 4% 6 6% 2015 7 4% 6 4% 6 6% 2015 7 4% 6 4% 6 6%	1996 #NIA #NIA <td< td=""><td>1996 #N/A <td< td=""><td>1996 #NIA <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<></td></td<></td></td<></td></td<></td></td<></td></td<></td></td<>	1996 #N/A #N/A <td< td=""><td>1996 #NIA <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<></td></td<></td></td<></td></td<></td></td<></td></td<>	1996 #NIA #NIA <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<></td></td<></td></td<></td></td<></td></td<>	1996 #N/A #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<></td></td<></td></td<></td></td<>	1996 #N/A #N/A <td< td=""><td>1996 #N/A <td< td=""><td>1996 #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<></td></td<></td></td<>	1996 #N/A #N/A <td< td=""><td>1996 #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<></td></td<>	1996 #N/A #N/A <th< td=""><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td><td>1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A</td></th<>	1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A	1996 #N/A #N/A #N/A #N/A #N/A #N/A #N/A #N/A

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Sleepy Eye Monthly Non-Coincident Peak Demand (MW)

_	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Ocl	Nov	Dec	Wntr Pk
-	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	1997	#N/A	#N/A	#N/A .	#N/A									
	1998	#INIA	#NIA	#N/A	#N/A	#NIA	#N/A	A\M#	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<u> </u>	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ĕ	2000	#NIA	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2001	#N/A	#N/A	#N/A	#N/A	#N/A	9 9	106	118	90	8 8	6.9	67	AIN#
ï	2002	59	59	59	64	74	9 9	10 2	106	108	67	6 5	6 5	6 9
	2003	66	64	6 1	60	66	90	100	12 3	10 2	76	69	7 1	66
	2004	69	67	63	8 8	73	99	11 1	10 1	11 1	88	76	78	7 1
	2005	6.8	6.3	6.2	63	8.5	11 0	11 2	11 7	10 5	8.0	7.0	7 2	78
	2006	7 0	67	6.5	67	71	10 3	10 8	12 0	11 2	83	76	76	7 2
	2007	71	68	66	67	72	10 4	10 9	12 1	114	8 4	77	77	76
	2008	72	6.9	67	6.9	73	106	11 1	123	116	8 5	78	7 B	77
e e	2009	73	70	68	70	74	107	11 3	12 5	117	87	79	79	7 B
Projected	2010	74	71	69	70	75	108	114	126	119	88	8.0	8 0	7 9
Ē	2011	75	72	70	71	76	110	115	128	120	89	8 1	81	0.8
o.	2012	7 5	73	70	72	77	11 1	117	12 9	12 1	90	82	82	8 1
	2013	76	73	71	73	77	11 2	118	13 0	123	9 1	8 3	83	8 2
	2014	77	74	72	73	7 B	11 3	11 9	13 2	124	91	83	83	8.3
	2015	77	75	7 2	7.4	. 79	114	120	13 3	12 5	92	8 4	8 4	8.3
	2018	7 B	75	7 3	75	79	11 5	12 1	13 4	126	93	8 5	8 5	8 4
	2017	79	76	73	75	80	116	122	13 5	127	9 4	8 5	85	8 5
	2018	79	76	74	76	8.0	117	123	13 6	128	94	B 6	86	8 5
Projected	2019	8.0	77	7 4	76	81	117	12 3	13 6	12 B	9 5	86	8 5	8.8
g g	2020	80	77	7 5	76	8 1	11 8	12 4	13 7	129	95	86	86	8 6
5	2021	80	77	7 5	77	8 1	11 B	12 4	13 8	129	96	87	87	86
Δ.	2022	81	78	75	77	8 2	119	12 5	13 8	130	96	87	87	8 7
	2023	8 1	78	76	77	82	119	125	13 9	13 1	96	88	88	8 7
	2024	81	78	76	78	83	12 0	126	14 0	13 1	97	88	8.8	8 8
	2025	82	7.9	76	7.8	B 3	12 0	126	14 0	132	97	88	88	8 8

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug .	Sap	Oct	Nov	Dec	Watr Pk
	1996													
	1997													
	1998													
Historical	1999													
풉	2000													
55	2001													
\equiv	2002	70 9%	69 1%	68 4%	. 62 2%	56 0%	55 8%	66 9%	63 2%	58 2%	74 4%	73 1%	69 8%	72 5%
	2003	69 4%	71 7%	71 6%	65 0%	56 0%	56 2%	65 7%	58 9%	617%	67 4%	71 0%	68 9%	77 0%
	2004	68 8%	65 1%	54 8%	60 5%	61 9%	54 5%	60 7%	62 5%	65 1%	697%	69 9%	71 3%	75 4%
	2005	69 9%	70 2%	69 4%	67 8%	67 2%	56 1%	64 1%	63 9%	67 5%	70 1%	75 0%	68 5%	70 6%
	2006	67 8%	67 9%	64 7%	63 4%	61 4%	56 0%	65 7%	60 3%	62 1%	68 2%	69 2%	68 0%	76 0%
	2007	67 8%	87 9%	64 7%	63 4%	61 4%	56 0%	657%	60 3%	62 1%	68 2%	69 0%	67 8%	72 5%
	2008	67 8%	65 6%	64 7%	63 4%	51 4%	56 0%	657%	60 3%	62 1%	68 2%	69 1%	67 9%	72 5%
ㅁ	2009	67 8%	67 9%	64 7%	63 4%	61 4%	56 0%	657%	60 3%	62 1%	68 2%	69 3%	6B 1%	72 5%
Projected	2010	67 8%	67 9%	64 7%	63 4%	61 4%	56 0%	65 7%	60 3%	62 1%	68 2%	69 3%	68 1%	72 5%
Ğ	2011	67 8%	67 9%	64 7%	63 4%	514%	56 0%	65 7%	60 3%	62 1%	6B 2%	69 4%	68 2%	72 5%
ñ.	2012	67 8%	65 6%	64 7%	63 4%	61 4%	56 0%	65 7%	60 3%	62 1%	68 2%	69 4%	68 3%	72.5%
	2013	67 8%	67 9%	64 7%	63 4%	614%	56 0%	65 7%	60 3%	62 1%	68 2%	69 5%	68 3%	72 5%
	2014	67 8%	67 9%	64 7%	63 4%	61 4%	56 0%	65 7%	60 3%	62 1%	68 2%	59 5%	68 3%	72 5%
	_2015	67.8%	67 9%	64 7%	63 4%	61 4%	56 0%	65 7%	60 3%	62 1%	68 2%	69 6%	68 4%	72 5%
Avg.	1996-2005	69 8%	69 0%	66 1%	63 9%	60 3%	55 7%	64 3%	62 1%	63 1%	70 4%	72 2%	69 7%	73 9%
Æ	2006-2015	67 8%	67 4%	64 7%	63 4%	61 4%	56 0%	65 7%	60 3%	62 1%	68 2%	69 3%	68 1%	72 9%

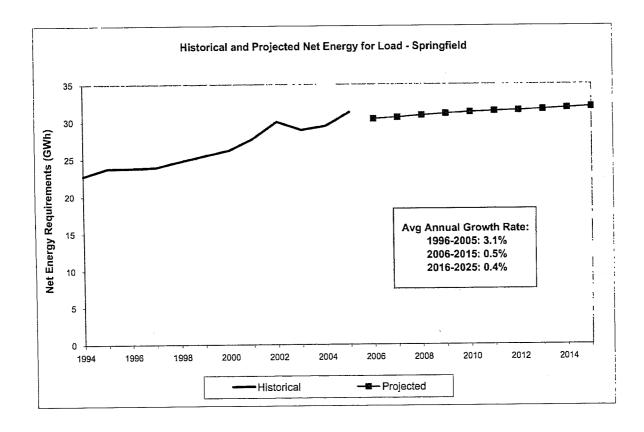
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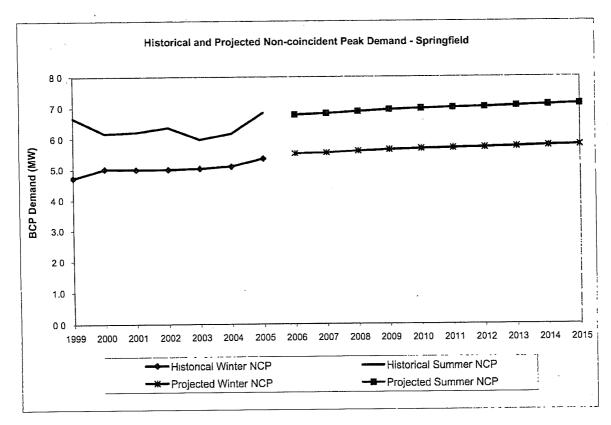
Sleepy Eye Monthly Coincident-Peak Demand (MW)

	Year	Jan	Feb_	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	6 6	6 5	61	63	69	10 1	104	11 9	11.0	79	7 4	73	6.6
	2007	67	66	62	54	70	10 2	10 5	12 1	11.1	80	75	75	67
	2008	68	67	63	65	71	10 4	107	12 3	113	81	76	76	6.8
2	2009	69	68	64	66	72	10 5	108	12 5	11 5	82	77	77	6 9
ផ្ល	2010	70	69	6.5	66	73	10 6	110	12 6	116	83	78	77	70
Projecte	2011	70	70	65	67	74	10 8	11 1	12 8	11 8	B 4	79	78	70
ď	2012	71	70	66	68	74	10 9	11 2	12 9	11 9	8 5	79	79	7 1
	2013	72	71	67	69	75	11 0	11 3	13 0	12 0	86	80	80	72
	2014	73	72	67	69	76	11 1	114	13 1	12 1	86	8 1	80	73
	2015	73	72	68	70	<u>76</u>	11.2	115	13 2	12 2	87	81	8 1	73
	2016	74	73	68	70	77	11 3	116	13 3	12 3	8.8	82	82	74
	2017	74	73	69	7 1	7 B	113	117	13.5	124	89	83	82	7.4
	2018	75	. 74	69	71	78	11 4	118	13 5	12 5	89	83	8.3	7.5
2	2019	75	74	70	72	78	11 5	119	13 6	126	90	83	83	75
rojected	2020	76	75	70	72	79	11 5	11 9	13 7	. 126	90	8 4	83	76
õ	2021	76	75	70	72	79	116	120	13 7	127	90	84	8.4	76
ď.	2022	76	75	71	73	80	116	12 0	13 8	12 7	91	B 4	84	76
	2023	77	76	71	73	80	11 7	12 1	13 9	128	91	8.5	85	77
	2024	77	76	71	73	80	11 7	12 1	13 9	128	92	85	8.5	77
	2025	77	76	72	74	8 1	11 8	12 2	14 0	129	92	86	8.5	77

	Year	Jan	Feb	Mar	_Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	92 1%
	2007	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
	2008	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
'n	2009	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
ŭ	2010	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
ö	2011	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
ŭ	2012	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
	2013	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
	2014	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
	2015	94 5%	96 8%	93 8%	94 4%	97 2%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	87 9%
	2006-2015	94 5%	96.8%	93 8%	94 4%	96 8%	98 0%	96 2%	99 8%	97 9%	94 6%	97 0%	96 6%	88 3%

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Springfield Historical and Projected Net Energy Requirements and Peak Demand

			Net Energ	y Requireme	ents (CY)			Non-	Coinciden	t Peak Dem	and		
		Actual	Percent	Normalized		Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	23,810	-	24,134	•	1.4%	4.5	+	59.8%	5.9	*·	46 0%	#1
	1997	23,921	0 5%	24,219	0.4%	1.2%	4.6	1.0%	59.5%	6.0	1 8%	45 4%	#N
	1998	24,723	3 4%	24,521	1.2%	-08%	4.8	3.7%	59.3%	6.3	4 6%	44.8%	#N
g	1999	25,478	3 1%	25,241	2.9%	-0 9%	47	-0.9%	61.6%	6.7	5 9%	43.6%	#N
Historical	2000	26,187	2 8%	26,169	3.7%	-0 1%	5.0	6.2%	59.6%	6.2	-7 3%	48 4%	#N
ist	2001	27,723	5 9%	26,876	2.7%	-3 1%	5 0	-0 3%	63.3%	6.2	0.6%	50 9%	#N
I	2002	30,012	8 3%	28,832	7 3%	-3 9%	5 0	0 0%	68 5%	6.4	2 4%	53 8%	#N
	2003	28,920	-3 6%	28,204	-2 2%	-2 5%	50	0 6%	65 6%	60	-6.0%	55.1%	#N
	2004	29,445	1 8%	29,945	6 2%	1.7%	5 1	1 5%	65.8%	6.2	31%	54.5%	#N
_	2005	31,270	6 2%	29,982	0 1%	-4 1%	5 4	5 0%	66.6%	6.8	10.8%	52.2%	#N
	2006	30,397	-2 8%	30,397	1 4%		5 5	3 2%	62.8%	68	-0.9%	51.2%	5.
	2007	30,571	0 6%	30,571	0 6%		56	0.6%	62 8%	6 B	0.6%	51.2%	5
	2008	30,840	0 9%	30,840	0 9%		56	0 9%	62.8%	6 9	0.9%	51 2%	5.
	2009	31,084	0 8%	31,084	0 8%		5 7	0 8%	62 8%	6 9	0.8%	51.2%	5
	2010	31,261	06%	31,261	0.6%		5 7	0.6%	62.8%	7 0	0.6%	51 2%	5.
	2011	31,372	0.4%	31,372	0 4%		57	0 4%	62 8%	7.0	0.4%	51.2%	5.
	2012	31,468	0 3%	31,468	0 3%		5.7	0 3%	62 8%	7 0	0.3%	51 2%	5.
	2013	31,626	0 5%	31,626	0 5%		58	0.5%	62 8%	7 1	0.5%	51 2%	5
ed	2014	31,791	0.5%	31,791	0 5%		5.8	0 5%	62 8%	7.1	0.5%	51 2%	5
Projected	2015	31,934	0.4%	31,934	0.4%		58	0 4%	62.8%	7 1	0.4%	51 2%	5
Ď	2016	32,056	0.4%	32,056	0.4%		5.8	0.4%	62.8%	7.2	0.4%	51 2%	5
σ.	2017	32,185	0.4%	32,185	0.4%		59	0 4%	62.8%	7.2	0 4%	51 2%	5
	2018	32,314	0.4%	32,314	0.4%		5.9	0.4%	62.8%	7.2	0 4%	51 2%	5
	2019	32,463	0.5%	32,463	0 5%		59	0 5%	62.8%	7 2	0.5%	51.2%	5
	2020	32,602	0 4%	32,602	0 4%		5.9	0 4%	62 8%	7 3	0.4%	51.2%	5
•	2021	32,745	0 4%	32,745	0 4%		6.0	0.4%	62 8%	73	0.4%	51.2%	5.
	2022	32,887	0 4%	32,887	0 4%		60	0 4%	62 8%	73	0.4%	51 2%	5
	2023	33,037	0.5%	33,037	0 5%		6.0	0.5%	62 8%	7.4	0.5%	51 2%	5
	2024	33,184	0.4%	33,184	0 4%		6.0	0 4%	62 8%	7 4	0.4%	51 2%	5.
	2025	33,326	0.4%	33,326	0.4%		61	0.4%	62 8%	7.4	0.4%	51 2%	5.
ŭ,	Thru 2005		3.1%		2.4%		-	1 8%	63 0%	····	1.6%	49.5%	
AAGR	2006-2015		0 5%		0 5%			0 5%	62.8%		0.5%	51.2%	
⋖	2016-2025		0 4%		0 4%			0.4%	62.8%		0.4%	51.2%	

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Springfield Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul .	Aug	Sep	Oct	VaV	Dec	CY Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	A\N#	#N/A	#N/A	#N/A	#N/A	#N/
	1997	#NIA	#N/A	#14										
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
R	1999	HNIA	#N/A	#N/A	#N/A	AINIL	AIN#	#N/A	AIN#	#N/A	#N/A	#N/A	#N/A	#N/
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N
並	2001	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
工	2002	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
	2003	2,518	2,198	2,375	2,212	2,249	2,394	2,815	2,817	2,098	2,298	2,326	2,619	28,92
	2004	2,658	2,442	2,459	2,243	2,242	2,387	2,757	2,503	2,471	2,283	2,326	2,675	29,44
	2005	2,630	2,255	2,499	2,326	2,321	2,700	3,112	2,956	2,661	2,525	2,548	2,736	31,27
	2006	2,649	2,341	2,488	2,301	2,311	2,535	2,943	2,806	2,448	2,409	2,441	2,725	30,39
	2007	2,664	2,354	2,503	2,314	2,325	2,550	2,960	2,822	2,462	2,423	2,455	2,740	30,57
	2008	2,688	2,375	2,525	2,334	2,345	2,572	2,986	2,847	2,483	2,444	2,477	2,764	30,84
Projected	2009	. 2,709	2,394	2,545	2,353	2,364	2,592	3,010	2,870	2,503	2,463	2,496	2,786	31,08
귫	2010	2,724	2,408	2,559	2,366	2,377	2,607	3,027	2,886	2,517	2,477	2,510	2,802	31,26
ᅙ	2011	2,734	2,416	2,568	2,375	2,386	2,616	3,038	2,896	2,526	2,486	2,519	2,812	31,37
ū.	2012	2,742	2,423	2,576	2,382	2,393	2,624	3,047	2,905	2,534	2,494	2,527	2,821	31,46
	2013	2,756	2,436	2,589	2,394	2,405	2,638	3,062	2,920	2,547	2,506	2,540	2,835	31,62
	2014	2,771	2,448	2,602	2,406	2,417	2,651	3,078	2,935	2,560	2,519	2,553	2,850	31,79
	2015	2,783	2,459	2,614	2,417	2,428	2,663	3,092	2,948	2,571	2,531	2,565	2,862	31,93
	201B	2,794	2,469	2,624	2,426	2,438	2,673	3,104	2,959	2,581	2,540	2,574	2,873	32,05
	2017	2,805	2,479	2,635	2,436	2,447	2,684	3,116	2,971	2,591	2,551	2,585	2,885	32,18
	2018	2,816	2,489	2,645	2,446	2,457	2,695	3,129	2,983	2,602	2,561	2,595	2,896	32,31
5	2019	2,829	2,500	2,657	2,457	2,468	2,707	3,143	2,997	2,614	2,573	2,607	2,910	32,46
뒳	· 2020	2,841	2,511	2,669	2,468	2,479	2,719	3,157	3,010	2,625	2,584	2,618	2,922	32,60
Projected	2021	2,854	2,522	2,680	2,478	2,490	2,731	3,171	3,023	2,637	2,595	2,630	2,935	32,74
ñ.	2022	2,866	2,533	2,692	2,489	2,501	2,743	3,184	3,036	2,648	2,606	2,641	2,948	32,88
	2023	2,879	2,544	2,704	2,500	2,512	2,755	3,199	3,050	2,660	2,618	2,653	2,961	33,03
	2024	2,892	2,556	2,716	2,512	2,523	2,768	3,213	3,063	2,672	2,630	2,665	2,974	33,18
	2025	2,904	2,567	2,728	2,522	2,534	2,779	3,227	3,077	2,683	2,641	2,676	2,987	33,32

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#/N/
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
蜇	2001	#N/A	∜N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
Ï	2002	#N/A	1/N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
	2003	8 7%	7 8%	8 2%	7 6%	7 8%	8 3%	97%	9 7%	7 3%	7 9%	80%	9 1%	100 0
	2004	9 0%	B 3%	B 4%	7 6%	7 6%	8 1%	94%	8 5%	8 4%	7 8%	7 9%	9 1%	100 09
	2005	8 4%_	7 2%	8 0%	7 4%	7 4%	8 6%	10 0%	9 5%	8 5%	8 1%	8 1%	87%	100 09
	2006	8 7%	77%	8 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	80%	9 0%	100 0
	2007	8 7%	77%	8 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	80%	9 0%	ים ממו
	2008	87%	77%	B 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	80%	9 0%	100 0
8	2009	8 7%	77%	8 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	80%	9 0%	100 0
ដ	2010	87%	77%	8 2%	7 6%	7 6%	83% -	97%	9 2%	8 1%	7 9%	80%	9 0%	100 09
Projected	2011	8 7%	77%	82%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	80%	90% .	100 09
ď.	2012	8 7%	77%	8 2%	76%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	8 0%	9 0%	100 09
	2013	8 7%	77%	8 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	8 0%	9 0%	100 03
	2014	87%	77%	8 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	80%	9 0%	100 09
	2015	8 7%	77%	8 2%	7 6%	7 6%	8 3%	97%	9 2%	8 1%	7 9%	8 0%	9 0%	100 09
ξņ	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/
Æ	2006-2015	87%	7 7%	8 2%	7.6%	7 6%	5 3%	97%	9 2%	8 1%	7 9%	8 0%	9 0%	100 09

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Springfield Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wnir Pk
	1996	#N/A												
	1997	#N/A												
	1998	#N/A												
77	1999	#N/A												
Historical	2000	#N/A												
놢	2001	#N/A												
Ī	2002	#N/A	∦N/A	#N/A	#N/A									
. ***	2003	49	50	50	47	47	58	58	60	56	47	47	49	50
	2004	51	50	50	46	47	60	62	62	59	46	49	5 4	5 1
	2005	51	48	48	47	47	6.4	68	63_	57	50	49	53	5.4
	2006	5 5	5 2	52	52	50	6.5	. 68	66	6 2	50	52	5 4	5 5
	2007	56	53	52	52	51	6 5	68	66	6 2	50	53	5 5	56
	200B	56	53	53	52	51	6.6	69	67	63	51	53	5 5	56
교	2009	57	53	53	53	5 1	66	6 9	67	63	5 1	53	56	57
Projected	2010	57	5 4	53	53	52	67	70	67	63	5 1	5 4	56	5 7
ğ	2011	57.	54	5 4	53	52	67	70	68	64	5 2	5 4	56	57
ュ	2012	57	5 4	5 4	53	5 2	67	ט 7	6 B	64	52	5 4	5 8	57
	2013 .	5 8	54	5 4	5 4	5 2	67	71	68	6 4	52	5 4	57	58
	2014	58	5 5	5 4	54	53	68	7 1	69	6 4	52	5 5	5 7	5 B
	2015	5.8	5.5	55	5 4	53	6.8	71	69_	6.5	53	5 5	57	5.8
	2016	5 8	55	5 5	5 4	53	68	72	6 9	6 5	53	5 5	57	58
	2017	59	5 5	5 5	5 5	53	69	72	69	6 51	5 3	5 5	58	5 9
	2018	5 9	56	5 5	5 5	53	69	72	70	66	53	56	58	59
72	2019	5 9	56	56	5 5	5 4	69	72	70	66	53	56	58	59
Projected	2020	59	56	56	5 5	5 4	6 9	73	7.0	6 6	5 4	56	58	5 9
Ē	2021	60	56	56	56	5 4	70	73	71	6 6	5 4	5.6	59	60
ā.	2022	60	57	5.6	56	5 4	70	73	71	67	5.4	56	5 9	6 0
	2023	60	57	56	56	5 5	70	74	71	67	5 4	57	5 9	60
	2024	60	57	57	56	5.5	7 1	7.4	72	67	5.5	5 7	59	60
	2025	61	57	57	57	5 5	71	7.4	72	6 B	5.5	57	6.0	61

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996													
	1997													
	1998													
ī	1999													
Historical	2000													
st	2001													
Ī	2002													
	2003	69 4%	65 0%	63 8%	64 8%	64 D%	57 4%	64 8%	63 2%	52 4%	65 8%	69 0%	715%	65 6%
	2004	70 0%	70 1%	66 6%	67 2%	64 3%	55 3%	60 0%	54 6%	57 8%	66 8%	66 4%	67 1%	65 8%
	2005	68 7%	69 8%	70 3%	69 1%	66 8%	58 9%	61 2%	62 7%	64 6%	67 8%	71 9%	69 3%	66.6%
	2006	64 4%	66 7%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 9%	67 3%	62.8%
	2007	64 4%	66 7%	64 4%	61 9%	61.8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 7%	67 1%	62 8%
	2008	64 4%	64 4%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 7%	67 2%	62 8%
Ä	2009	64 4%	66 7%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 9%	67 3%	62 8%
Projected	2010	64 4%	66 7%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	65 0%	67 4%	62 8%
픙	2011	64 4%	66 7%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	65 0%	67 5%	62 8%
귭	2012	64 4%	64 4%	64 4%	61.9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 9%	67 4%	62 8%
	2013	64 4%	66 7%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 9%	67 3%	62 8%
	2014	64 4%	66 7%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 9%	67 4%	62 8%
	2015	64 4%	66 7%	64 4%	61 9%	61.8%	54 4%	58 3%	57 5%	55 2%	64 8%	65 0%	67 4%	62 8%
Avg.	1996-2005	69 3%	68 3%	66 9%	67 1%	65 0%	57 2%	62 0%	60 2%	58 3%	66 8%	69 1%	69 3%	66 0%
₹	2006-2015	64 4%	66 2%	64 4%	61 9%	61 8%	54 4%	58 3%	57 5%	55 2%	64 8%	64 9%	67 3%	62 8%

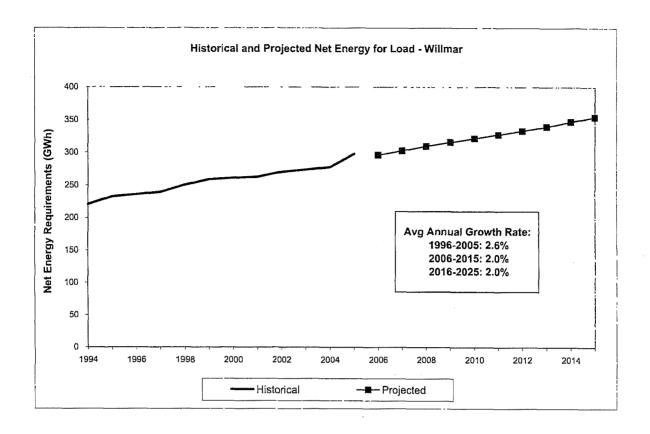
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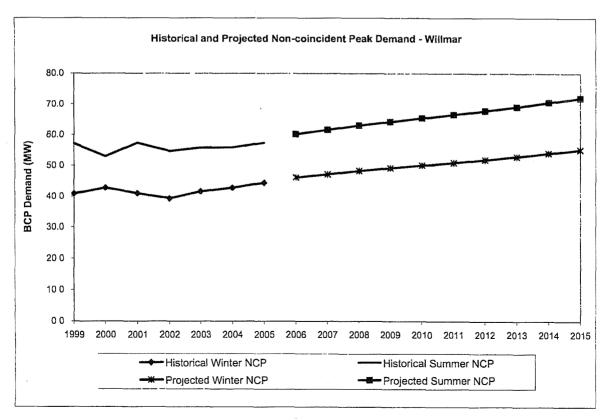
Springfield Monthly Coincident-Peak Demand (MW)

	Year_	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	5 4	51	50	4 9	4 8	6 2	62	59	60	48	48	50	5 4
	2007	54	52	5 1	49	4 B	62	63	59	60	48	49	5 D	5 4
	2008	55	52	51	50	4 B	63	63	60	61	49	49	51	55
8	2009	55	5 3	52	50	49	63	64	6 0	61	49	49	51	5 5
Projected	2010	55	53	52	50	49	63	64	60	62	49	49	51	5 5
ğ	2011	55	53	52	51	49	6 4	6 4	61	62	4 9	5 0	51	5 5
ď.	2012	56	53	52	51	49	64	6 4	6 1	62	50	50	5 2	56
	2013	56	54	52	51	50	64	65	61	62	50	50	52	56
	2014	56	54	53	51	50	65	65	61	63	50	50	5 2	56
	2015	56	5.4	53	52	50	6.5	6 5	6 2	63	50	50	5 2	5 6
	2016	57	5 4	53	52	50	6.5	6.6	62	63	51	51	53	57
	2017	57	5 4	53	52	50	6 5	66	62	64	51	5 1	53	57
	2018	57	55	5 4	52	51	66	66	62	64	51	5 1	53	57
B	2019	57	55	5 4	52	5 1	66	66	63	64	51	5 1	53	57
Projected	2020	58	55	54	53	51	66	67	63	64	51	5 2	53	5 B
ĕ	2021	58	55	5 4	53	5 1	67	67	63	65	5 2	52	5 4	5 B
ŭ	2022	- 58	56	55	53	5 1	67	67	64	65	52	52	5 4	58
	2023	58	56	55	53	5 2	67	88	6 4	65	52	5 2	54	58
	2024	59	56	55	54	5 2	67	88	64	66	52	52	54	59
	2025	5.9	56	5 5	5 4	52	6.8	6.8	64	6 6	53	53	5 5	5 9

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	917%	97 3%
	2007	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	917%	97 3%
	2008	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	917%	97.3%
70	2009	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
벑	2010	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	91 7%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
ğ	2011	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
₫.	2012	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	91 7%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
	2013	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
	2014	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
	2015	97 3%	98 4%	97 0%	95 0%	94 7%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	91 7%	97 3%
	2006-2015	97 3%	98 4%	97 0%	95 0%	98 4%	95 3%	917%	89 5%	97 4%	95 9%	92 1%	917%	97 3%

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Willmar
Historical and Projected Net Energy Requirements and Peak Demand

		i	Net Energ	y Requireme	ints (CY)			Non-	Coinciden	t Peak Dem	and		C
	,	Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	235,605	-	231,736		-1.6%	39 9	•	67 4%	50 8		52 9%	#N/A
	1997	239,082	1 5%	239,694	3.4%	0.3%	38 7	-3,0%	70 5%	51 4	1 2%	53 1%	#N/A
	1998	250,318	4.7%	261,241	9 0%	4.4%	39.2	1 3%	72.9%	54 1	5 3%	52 8%	#N/A
ä	1999	258,923	3 4%	267,440	2 4%	3.3%	40.9	4.3%	72 3%	57,2	5 7%	51 7%	#N/A
ij	2000	260,979	0.8%	265,254	-0.8%	1.6%	42 8	4 6%	69 6%	53 0	-7 3%	56 2%	#N/A
Historical	2001	262,782	0.7%	265,680	0.2%	1.1%	41 0	-4.2%	73.2%	57.4	8.3%	52 3%	#N/A
I	2002	270,242	28%	269,263	1 3%	-0.4%	39 3	-4 1%	78 5%	54 7	-4.7%	56 4%	#N/A
	2003	273,645	1.3%	273,781	1.7%	0 0%	41 6	5 9%	75.1%	55 8	2 0%	56 0%	#N/A
	2004	277,749	1.5%	286,058	4 5%	3.0%	42 8	2 9%	74 1%	55 9	0 2%	56 7%	#N/A
_	2005	297,981	7 3%	301,215	5 3%	1.1%	44 4	3 7%	76.6%	57.4	2.7%	59.3%	#N/A
	2006	296,090	-0 6%	296,090	-1 7%		46.2	4 0%	73 2%	60.3	5.0%	56.1%	46 2
	2007	302,782	2.3%	302,782	2.3%		47 2	2 3%	73 2%	61 6	2.3%	56 1%	47 2
	2008	309,881	2 3%	309,881	2.3%		48 3	2 3%	73 2%	63,1	2.3%	56 1%	48 3
	2009	315,712	1 9%	315,712	1.9%		49.2	1 9%	73 2%	64 3	1.9%	56 1%	49 2
	2010	321,518	1 8%	321,518	1 8%		50 1	18%	73 2%	65 4	1.8%	56 1%	50 1
	2011	327,244	1 8%	327,244	1.8%		51 0	18%	73 2%	66 6	1.8%	56 1%	51 0
	2012	333,295	1 8%	333,295	1.8%		52.0	1.8%	73.2%	67.8	1 8%	56.1%	52.0
	2013	339,699	1 9%	339,699	1.9%		53.0	1 9%	73 2%	69 1	1.9%	56.1%	53 0
ba	2014	347,051	2.2%	347,051	2 2%		54 1	2 2%	73 2%	70.6	2.2%	56.1%	54 1
Projected	2015	354,188	21%	354,188	2 1%		55 2	2 1%	73 2%	72.1	2 1%	56.1%	55.2
ē	2016	361,408	2 0%	361,40B	2 0%		56 3	2 0%	73 2%	73 6	2 0%	56 1%	56,3
Δ.	2017	368,630	2 0%	368,630	2 0%		57 5	2 0%	73 2%	75 0	2 0%	56 1%	57 5
	2018	376,151	2.0%	376,151	2 0%		58 6	2 0%	73 2%	76 6	2.0%	56 1%	58 6
	2019	383,647	2.0%	383,647	2 0%		59 8	2.0%	73 2%	78 1	2 0%	56 1%	59 B
	2020	391,362	2.0%	391,362	2 0%		61 0	20%	73 2%	79 7	2 0%	56 1%	, 61 0
	2021	399,322	2 0%	399,322	2.0%		62.2	2.0%	73.2%	81.3	2.0%	56 1%	62.2
	2022	407,473	2 0%	407,473	2 0%		63 5	2.0%	73.2%	82 9	2.0%	56 1%	63.5
	2023	415,789	2 0%	415,789	2 0%		64 8	2 0%	73 2%	84 6	2 0%	56 1%	64.8
	2024	424,242	2 0%	424,242	2 0%		66 1	2.0%	73 2%	86 3	2 0%	56.1%	66 1
_	2025	432,779	20%	432,779	2 0%		67 5	2 0%	73 2%	88 1	2.0%	56 1%	67.5
<u>بر</u>	Thru 2005		26%		3 0%			1 2%	73 0%		1 4%	54 7%	5,.6
AAGR	2006-2015		2 0%		2 0%			2 0%	73.2%		2 0%	56 1%	
⋖	2016-2025		2.0%		2 0%			2 0%	73.2%		2 0%	56 1%	

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Willmar Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY To
	1996	#N/A	1											
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	∜N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#
	1998	#N/A	#											
77	1999	#N/A	#											
Ĕ	2000	#N/A	i.											
Historical	2001	22,528	20,643	21,364	19,881	20,725	22,059	26,023	26,252	20,390	20,815	20,056	22,044	262
王	2002	22,551	19,716	21,600	20,400	20,385	23,320	27,905	24,499	22,750	21,797	21,978	23,341	270
	2003	23,712	21,449	22,068	20,320	20,531	22,750	26,591	26,903	21,911	21,926	21,678	23,807	273
	2004	24,206	22,545	22,741	20,522	20,786	22,568	26,070	24,182	24,076	22,708	22,598	24,747	277
	2005	25,585	21,931	23,880	21,799	22,542	26,671	29,039	27,850	24,910	23,610	23,873	26,291	297
	2006	25,395	22,779	23,917	22,055	22,492	25,116	29,063	27,797	24,405	23,745	23,589	25,735	296
	2007	25,969	23,294	24,458	22 554	23,000	25,684	29,720	28,425	24,957	24,282	24,122	26,317	302
	2008	26,578	23,840	25,031	23,083	23,540	26,286	30,417	29,091	25,542	24,851	24,688	26,934	309
72	2009	27,078	24,289	25,502	23,517	23,983	26,781	30,989	29,639	26,023	25,319	25,153	27,441	315
Projected	2010	27,576	24,735	25,971	23,949	24,424	27,273	31,559	30,184	26,501	25,785	25,615	27,945	321
충	2011	28,067	25,176	26,434	24,376	24,859	27,759	32,121	30,721	26,973	25,244	26,071	28,443	327
ň.	2012	28,586	25,641	26,923	24,827	25,318	28,272	32,715	31,289	27,472	26,729	26,553	28,969	333
	2013	29,135	26,134	27,440	25,304	25,805	28,815	33,343	31,891	28,000	27,243	27,064	29,526	339
	2014	29,766	26,700	28,034	25,851	26,363	29,439	34,065	32,581	28,606	27,832	27,649	30,165	347
	2015	30,378	27,249	28,610	26,383	26,905	30,044	34,766	33,251	29,194	28,405	28,218	30,785	354
	2016	30,997	27,804	29,194	26,921	27,454	30,657	35,474	33,929	29,789	28,984	28,793	31,412	361
	2017	31,617	28,360	29,777	27,459	28,003	31,269	36,183	34,607	30,384	29,563	29,368	32,040	368
	2018	32,262	28,938	30,385	28,019	28,574	31,907	36,921	35,313	31,004	30,166	29,968	32,694	376
교	2019	32,905	29,515	30,990	28,577	29,143	32,543	37,657	36,016	31,622	30,767	30,565	33,345	383
Ţ	2020	33,567	30,109	31,613	29,152	29,729	33,198	38,414	36,741	32,258	31,386	31,179	34,016	391
Projected	2021	34,249	30,721	32,256	29,745	30,334	33,873	39,196	37,488	32,914	32,024	31,814	34,708	399
₫.	2022	34,948	31,348	32,915	30,352	30,953	34,564	39,996	38,253	33,586	32,678	32,463	35,416	407
	2023	35,662	31,988	33,586	30,972	31,585	35,270	40,812	39,034	34,271	33,345	33,126	36,139	415
	2024	36,387	32,638	34,269	31,601	32,227	35,987	41,642	39,827	34,968	34,023	33,799	36,874	424
	2025	37,119	33,295	34,959	32,237	32,876	36,711	42,480	40,629	35,672	34,707	34,479	37,616	432

	Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Tota
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#						
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#						
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#						
77	1999	#N/A	#N/A	#N/A	#NIA	#N/A	#N/A	#						
Ĕ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#						
Historical	2001	8 6%	7 9%	8 1%	7 6%	7 9%	B 4%	9 9%	10 0%	7 8%	7 9%	76%	B 4%	100
Î	2002	8 3%	7 3%	8 0%	7 5%	7 5%	8 6%	10 3%	9 1%	8 4%	8 1%	8 1%	8 6%	100
	2003	8 7%	7 8%	8 1%	7 4%	7 5%	8 3%	9 7%	9 8%	8 0%	8 0%	7 9%	87%	100
	2004	8 7%	8 1%	8 2%	7 4%	7 5%	B 1%	9 4%	8 7%	8 7%	8 2%	81%	8 9%	100
	2005	8 6%	7 4%	8 0%	7 3%	7 6%	9 0%	9 7%	9 3%	B 4%	7 9%	8 0%	B 8%	100
	2006	8 6%	77%	8 1%	7 4%	7 5%	8 5%	9 8%	9 4%	8 2%	8 0%	80%	B7%	100
	2007	8 6%	77%	8 1%	7 4%	76%	8 5%	9 8%	9 4%	8 2%	8 0%	80%	B 7%	100
	2008	8 6%	7 7%	8 1%	7 4%	7 6%	8 5%	9 8%	9 4%	8 2%	8 0%	8 D%	B 7%	100
, g	2009	8 6%	77%	8 1%	7 4%	7 5%	8 5%	9 8%	9 4%	B 2%	8 0%	80%	B 7%	100
Projected	2010	8 6%	77%	8 1%	7 4%	7 6%	8 5%	988	9 4%	8 2%	B 0%	8 0%	87%	100
ĕ	2011	8 6%	77%	8 1%	7 4%	7 6%	8 5%	98%	9 4%	8 2%	8 0%	8 0%	8 7%	100
ď	2012	8 6%	77%	8 1%	7 4%	7 5%	8 5%	9 8%	9 4%	8 2%	8 0%	80%	8 7%	100
	2013	8 6%	77%	8 1%	7 4%	7 6%	8 5%	98%	9 4%	8 2%	8 0%	80%	B 7%	100
	2014	8 6%	77%	8 1%	7 4%	7 6%	8 5%	98%	9 4%	8 2%	8 0%	80%	8 7%	100
	2015	8 6%	77%_	B 1%	7 4%	7 6%	8 5%	9 8%	9 4%	8 2%	8 0%	8 0%	87%	100
Avg.	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	t						
á	2006-2015	8 6%	77%	8 1%	7 4%	76%	8 5%	98%	9 4%	8 2%	8 0%	8 0%	87%	100
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Willmar Monthly Non-Coincident Peak Demand (MW)

_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996	#N/A	#N/A	#N/A	#N/A	#N/A								
	1997	#N/A	#N/A	#N/A	#N/A	#N/A								
	1998	#N/A	#N/A	#N/A	#N/A	#N/A								
77	1999	#N/A	#N/A	#N/A	#N/A	#N/A								
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A								
뵕	2001	40 7	412	37 9	38 6	46 6	54 6	57 0	57 4	49 1	39 1	38 4	38 6	#N/A
Ī	2002	39 3	38 6	383	40.7	437	52 1	54 7	51 0	519	38 0	39 6	40 5	39 3
	2003	41 1	416	40 B	40 5	39 2	49 6	52 9	55 8	49 2	41 2	40 2	424	416
	2004	42 8	417	39 5	40 2	40 3	52 0	55 9	52 3	53 3	41 2	40 2	44 1	42 8
_	2005	44 4	427	40 1	40 5	398	57 4	56 6	57 1	. 490	42 8	427	45 6	44.4
	2006	46 2	45 6	43 3	42 0	43 1	56 B	60 3	58 4	537	46 2	44 B	460	46 2
	2007	47 2	467	44 3	429	44 1	58 1	61 6	59 7	54 9	47 2	45 B	47 1	47 2
	2008	48 3	477	45 3	439	45 1	59 4	63 1	61 1	56 2	48 3	467	48 0	48 3
교	2009	4Ð 2	486	46 2	44 8	46 D	60 5	64 3	62 2	57 2	49 2	47 6	48 9	49 2
Projected	2010	50 1	495	47 0	45 6	46 8	617	65 4	63 4	58 3	50 1	48 4	497	50 1
ᅙ	2011	51 0	50 4	47 9	46 4	47 7	62 7	66 6	64 5	59 3	51 0	49 3	50 6	51 0
ď.	2012	52 0	51 4	487	47 2	48 5	63 9	67 8	65 7	60 4	52 0	50 2	51 6	52 0
	2013	53 0	52 3	49 7	48 2	49 5	65 1	69 1	67 0	616	53 0	513	527	53 0
	2014	54 1	53 5	50 B	49 2	50 5	66 5	70 6	68 4	62 9	54 1	52 4	53 8	54 1
_	2015 -	55 2	54 6	518	50 2	516	67 9	72 1	69 8	64 2	55 2	53 5	54 9	55 2
	2016	56 3	55 7	52 9	51 2	52 6	69 3	73 6	712	65 5	56 4	54 5	· 56 0	56 3
	2017	57 5	56 8	53 9	52 3	53 7	70 7	75 0	727	66 8	57 5	55 6	57 2	57 5
	2018	58 6	58 0	55 0	53 3	54 8	72 1	76 6	74 1	68 2	58 7	56 7	58 3	58 6
B	2019	59 8	59 1	56 1	54 4	55 9	73 6	78 1	756	69 5	59 8	57 9	59 5	59 8
ដ	2020	61 D	603	57 2	55 5	57 0	75 0	79 7	77 1	70 9	61 0	59 1	607	61 0
Projected	2021	62 2	615	5B 4	56 6	58 2	76 6	813	78 7	72 4	62 3	60 3	619	62 2
ñ.	2022	63 5	62 8	59 6	57 8	59 3	78 1	82 9	80 3	73 9	63 6	61 5	63 2	63 5
	2023	64 B	64 1	60 B	58 9	606	79 7	84 6	81 9	754	64 9	62 7	64 5	64 8
	2024	66 1	65 4	62 0	60 1	618	813	86 3	83 6	769	66 2	64 0	65.8	66 1
-	2025	67.5	66 7	63 3	613	63 Q	83 D	88 1	85 3	785	67 5	65 3	67 1	67 5

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	1996													
	1997													
	1998						,							
79	1999													
Ĕ	2000													
Historical	2001	74 4%	74 6%	75 8%	71 5%	59 8%	56 1%	61 4%	61 5%	57 7%	716%	72.5%	76 8%	
Ξ	2002	77 1%	76 0%	75 8%	69 6%	62.7%	62 2%	68 6%	64 6%	60 9%	77 1%	77 1%	77 5%	78 5%
	2003	77 5%	76 7%	72.7%	69 7%	70 4%	63 7%	67 6%	64 8%	61 9%	71 5%	74 9%	75 5%	75 1%
	2004	76 0%	77 7%	77 4%	70 9%	69 3%	60 3%	62.7%	62 1%	62 7%	74 1%	78 1%	75 4%	74 1%
	2005	77 5%	76 4%	80 0%	74 8%	76 1%	64 5%	69 0%	65 6%	70 6%	74 1%	77.7%	77 5%	76 6%
	2006	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 2%	75 2%	73 2%
	2007	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 1%	75 1%	73 2%
	2008	74 0%	71 7%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 4%	75 5%	73 2%
핂	2009	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 5%	75 5%	73 2%
Projected	2010	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 5%	75 5%	73 2%
-	2011	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 5%	75 5%	73 2%
ų.	2012	74 0%	717%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 4%	75 4%	73 2%
	2013	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 2%	75 3%	73 2%
	2014	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 3%	75 3%	73 2%
	2015	74 0%	74 3%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 3%	75 4%	73 2%
<u>o</u> n	1996-2005	76 5%	76 3%	76 3%	71 3%	67 7%	61 4%	65 8%	63 7%	62.8%	73 7%	76 0%	76 5%	76 1%
Avg	2006-2015	74 0%	73 8%	74 2%	73 0%	70 1%	61 4%	64 8%	64 0%	63 2%	69 1%	73 3%	75 4%	73 2%
													. 2 -7 10	2.78

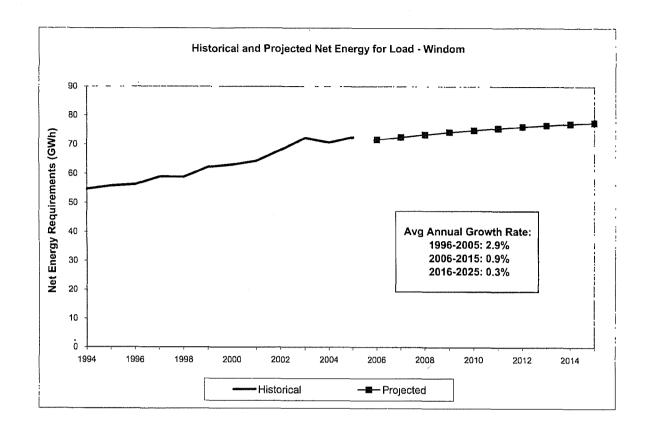
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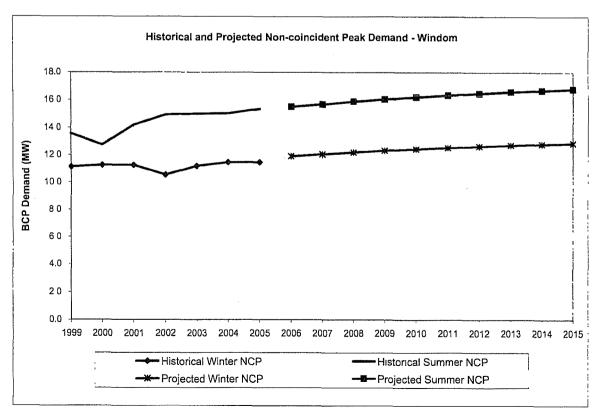
Willmar Monthly Coincident-Peak Demand (MW)

	Year	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk
	2006	46 2	45 6	433	41 6	43 1	56 4	59 5	56 7	53 1	46 2	44 5	46 0	46 2
	2007	47 2	467	44 3	42 5	44 1	57 7	60 9	58 0	54 3	47 2	45 5	47 1	47 2
	2008	48 3	47 7	45 3	43 5	45 1	59 0	623	59 4	55 6	483	46 4	48 0	48 3
밂	2009	49 2	486	46 2	44 3	46 0	60 1	63 5	60 5	56 7	49 2	47 2	48.9	49 2
ដ្ឋ	2010	50 1	49 5	47 0	45 1	46 8	61 2	64 6	616	57 7	50 1	48 1	49 7	50 1
Projected	2011	51 0	50 4	47 9	45 9	47 7	62 3	65 8	62 7	58 7	510	49 0	50 6	51 0
ō.	2012	52 0	514	487	46 8	48 5	63 5	67 0	63 9	598	52.0	49 9	51 6	52 0
	2013	53 0	52 3	497	47 7	49 5	64 7	68 3	65 1	61 0	53 0	51 0	52 7	53 0
	2014	54 1	53 5	50 B	487	50 5	66 1	69 8	66 5	623	54 1	52 0	53 8	54 1
	2015	55 2	54 6	51 8	49 7	51 6	67 5	712	67 9	63 6	55 2	53 1	54 9	55 2
	2016	56 3	55 7	52 9	50 7	52 6	68 8	727	69 3	64 9	56 4	54 1	56 D	56 3
	2017	57 5	56 8	53 9	517	53 7	70 2	74 1	70 7	66 2	57 5	55 2	57 2	57 5
	2018	58 6	58 0	55 0	52 8	54 8	71 G	756	72 1	67 5	58 7	56 4	58 3	58 6
닮	2019	59 8	59 1	56 1	53 9	55 9	73 1	77 1	73 5	68 9	59 8	57 5	59 5	59 B
Projected	2020	61 0	60 3	57 2	54 9	57 0	74 5	787	75 0	70 2	61.0	58 7	60 7	61 0
ਨੌ	2021	62 2	61 5	5B 4	56 1	58 2	76 0	803	76 5	717	62 3	59 9	61 9	62 2
ů.	2022	63 5	628	59 6	57 2	59 3	77 6	819	78 1	73 1	63 6	61 1	63 2	63 5
	2023	64 8	64 1	60 8	58 4	60 6	79 2	83 6	79 7	74 6	64 9	62 3	64 5	64 B
	2024	66 1	65 4	62 0	59 6	618	808	85 3	813	76 1	66 2	63 6	65 8	66 1
	2025	67.5	66 7	63.3	60 7	63 0	82 4	87 0	82 9	77.7	67.5	64 B	67 1	67 5

	<u> Year</u>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Watr Pk
Projected	2006	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2007	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	200B	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2009	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2010	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2011	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2012	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2013	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2014	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2015	100 0%	100 0%	100 በ%	99 0%	100 0%	99.3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%
	2006-2015	100 0%	100 0%	100 0%	99 0%	100 0%	99 3%	98 8%	97 2%	99 0%	100 0%	99 3%	100 0%	100 0%

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Windom Historical and Projected Net Energy Requirements and Peak Demand

				y Requireme				Non-	Coinciden	it Peak Dem	and		C
		Actual	Percent	Normalized	Percent	Percent	Winter	Percent	Load	Summer	Percent	Load	Winter
_	Year	(MWh)	Change	(MWh)	Change	Diff.	(MW)	Change	Factor	(MW)	Change	Factor	(MW)
	1996	56,281	-	56,702	-	0.7%	10 3	-	62 3%	12 4		51.7%	#N.
	1997	58,846	4 6%	59,249	4.5%	0.7%	9.6	-7 1%	70 2%	14.0	12 3%	48.1%	#N.
	1998	58,775	-0.1%	58,509	-1.2%	-0 5%	10.3	7.7%	65 1%	12.6	-9.4%	53 1%	#N.
g	1999	62,233	5.9%	61,914	5 8%	-0 5%	11 1	7 9%	63.8%	13.6	7 3%	52.3%	#N.
౼	2000	63,061	1 3%	63,037	1.8%	0.0%	11 3	1 1%	64.0%	128	-6.0%	56.4%	#N
Historical	2001	64,334	2.0%	63,242	03%	-1 7%	11 3	0 0%	65.3%	14 2	11.2%	51.8%	#N
Ξ	2002	68,102	5 9%	66,613	53%	-22%	10 5	-6 3%	73.7%	14 9	5 2%	52.1%	#N
	2003	72,214	6 0%	71,223	6 9%	-1 4%	11 2	6,0%	73.7%	15 0	0.5%	55 0%	#N
	2004	70,730	-2 1%	71,390	0 2%	0.9%	11 5	2 5%	70.4%	15 0	0 2%	53.7%	#N
	2005	72,488	2 5%	70,827	-0 8%	-2 3%	11 5	0 0%	72.2%	15 4	2 1%	53 9%	#N
	2006	71,674	-1 1%	71,674	1 2%		11 9	3 9%	68 7%	15 5	10%	52 8%	11
	2007	72,486	1 1%	72,486	1 1%		12 1	1 1%	68 7%	15 7	11%	52 8%	11
	2008	73,398	1.3%	73,398	1 3%		12 2	1.3%	68 7%	15 9	1 3%	52 8%	11
	2009	74,222	1.1%	74,222	11%		12.3	1 1%	68 7%	16.1	11%	52 8%	11.
	2010	74,910	0.9%	74,910	0.9%		12.5	0 9%	68 7%	16 2	0 9%	52 8%	11 :
•	2011	75,564	0.9%	75,564	0 9%		12.6	0.9%	68 7%	16.4	0.9%	52 8%	12.
	2012	76,157	0 8%	76,157	0 8%		12.7	0.8%	68 7%	16.5	0.8%	52 8%	12.
	2013	76,677	07%	76,677	0.7%		12 7	07%	68 7%	16 6	0.7%	52.8%	12
þ	2014	77,144	0 6%	77,144	0 6%		12 8	0.6%	68 7%	16 7	0 6%	52 8%	12
Projected	2015	77,565	0 5%	77,565	0 5%		12.9	0 5%	68.7%	16.8	0 5%	52 8%	12 :
ē	2016	77,945	0.5%	77,945	0 5%		13 0	0 5%	68.7%	16.9	0.5%	52 8%	12
D.	2017	78,338	0.5%	78,338	0 5%		13 0	0 5%	68.7%	17 0	0.5%	52 8%	12
	2018	78,669	0.4%	78,669	0 4%		13 1	0 4%	68 7%	17.0	0 4%	52.8%	12.
	2019	78,915	0.3%	78,915	0 3%		13.1	0 3%	68 7%	17 1	0.3%	52 8%	12.
	2020	79,131	0 3%	79,131	0 3%		13 2	0.3%	68 7%	17 1	0 3%	52 8%	12.0
	2021	79,310	0 2%	79,310	0 2%		13 2	0.2%	68 7%	17 2	0 2%	52 8%	12.0
	2022	79,506	0.2%	79,506	0 2%		13 2	0 2%	68.7%	17 2	0 2%	52 8%	12.0
	2023	79,715	0.3%	79,715	0.3%		13 3	0.3%	68 7%	17.2	0 3%	52.8%	12
	2024	79,884	0 2%	79,884	0 2%		13 3	0 2%	68.7%	17.3	0 2%	52.8%	12
	2025	80,048	0 2%	80,048	0 2%		133	0.2%	68 7%	17 3	0.2%	52 8%	12 1
œ.	Thru 2005		2 9%		2 5%			1 2%	68 1%		2.4%	52.8%	
AAGR	2006-2015		0.9%		0 9%			0 9%	68 7%		0 9%	52 8%	
Q.	2016-2025		0 3%		0.3%			0.3%	68 7%		0 3%	52 B%	

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Windom Monthly Net Energy Requirements (MWh)

	Year	Jan	Feb_	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY Total
-	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	AINIt	#N/A	#N/#
	1998	AIN#	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
ñ	1999	AIN#	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	INIA	#N/A	#N/A
Ĕ	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
Historical	2001	5,661	5,169	5,440	4,977	5,067	5,183 .	6,376	6,045	4,884	5,237	4,938	5,358	64,334
Ĩ	2002	5,682	4,958	5,404	5,026	5,085	5,935	7,195	6,184	5,551	5,697	5,612	5,774	68,102
	2003	6,158	5,647	6,038	5,487	5,652	5,976	6,932	7,026	5,718	5,805	5,608	6,167	72,214
	2004	6,200	5,704	5,887	5,337	5,619	5,995	6,598	5,981	6,119	5,731	5,605	5,952	70,730
	2005	6,250	5,507	5,958	5,500	5,607	6,688	7,127	6,353	6,049	5,752	5,626	6,062	72,488
	2006	6,172	5,561	5,920	5,425	5,569	6,128	7,058	6,512	5,828	5,819	5,643	6,038	71,674
	2007	6,242	5,624	5,987	5,487	5,632	6,197	7,138	6,586	5,894	5,885	5,707	6,107	72,486
	2008	6,321	5,695	6,062	5,556	5,703	6,275	7,228	6,669	5,968	5,959	5,779	6,184	73,398
E .	2009	6,392	5,759	6,130	5,618	5,767	6,346	7,309	6,743	6,035	6,026	5,844	6,253	74,222
Projected	2010	6,451	5,812	6,187	5,670	5,820	6,404	7,376	6,806	6,091	6,082	5,898	6,311	74,910
ē	2011	6,507	5,863	6,241	5,720	5,871	6,460	7,441	6,865	6,144	6,135	5,949	6,366	75,564
ñ.	2012	6,558	5,909	6,290	5,765	5,917	6,511	7,499	6,919	6,192	6,183	5,996	6,416	76,157
	2013	6,603	5,950	.6,333	5,804	5,957	6,556	7,551	6,966	6,235	6,226	6,037	6,460	76,677
	2014	6,643	5,986	6,372	5,839	5,994	6,595	7,596	7,009	6,273	6,263	6,074	6,499	77,144
	2015	6,680	6,019	6,408	5,871	6,026	6,631	7,638	7,047	6,307	6,298	6,107	6,535	77,565
	2016	6,712	6,048	6,438	5,900	6,056	6,664	7,675	7,082	6,338	6,328	6,137	6,567	77,945
	2017	6,746	6,079	6,470	5,930	6,086	6,698	7,714	7,117	6,370	6,360	6,168	6,600	78,338
	2018	6,775	6,104	6,498	5,955	6,112	6,726	7,747	7,147	6,397	6,387	6,194	6,628	78,669
B	2019	6,796	6,123	6,518	5,973	6,131	6,747	7,771	7,170	8,417	6,407	6,213	6,649	78,915
Projected	2020	6,815	6,140	6,536	5,990	6,148	6,765	7,792	7,189	6,434	6,425	6,230	6,667	79,131
ē	2021	6,830	6,154	6,550	6,003	6,162	6,781	7,810	7,206	6,449	6,439	6,244	6,682	79,310
ō.	2022	6,847	6,169	6,567	6,018	6,177	6,797	7,829	7,223	6,465	6,455	6,260	6,698	79,506
	2023	6,865	6,185	6,584	6,034	6,193	6,815	7,850	7,242	6,482	6,472	6,276	6,716	79,715
	2024	6,879	6,198	6,598	6,047	6,207	6,830	7,866	7,258	6,495	6,486	6,290	6,730	79,884
	2025	6,893	6,211	6,611	6,059	6,219	6,844	7,882	7,273	6,509	6,499	6,302	6,744	80,048

Monthly Energy Allocation Factors

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
•	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
	1997	#N/A	#N/A	#N/A	∦N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
70	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/#
녍	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#IN/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Historical	2001	88%	B 0%	8 5%	77%	7 9%	8 1%	99%	9 4%	7 6%	B 1%	77%	8 3%	100 0%
Ξ	2002	B 3%	7 3%	7 9%	7 4%	7 5%	8 7%	10 6%	9 1%	8 2%	8 4%	8 2%	8 5%	100 0%
	2003	B 5%	78%	B 4%	7 6%	7 8%	8 3%	9 6%	9 7%	7 9%	8 0%	7 8%	8 5%	100 0%
	2004	8 8%	8 1%	8 3%	7 5%	7 9%	8 5%	93%	8 5%	8 7%	8 1%	7 9%	8 4%	100 0%
	2005	8 6%	7 6%	B 2%_	7 6%	77%	9 2%	98%	8 8%	B 3%	7 9%	7 8%	8 4%	100 0%
	2006	8 6%	78%	8 3%	7 6%	7 8%	8 5%	98%	9 1%	8 1%	8 1%	7 9%	B 4%	100 0%
	2007	8 6%	78%	8 3%	7 6%	7 8%	8 5%	9 8%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
_	2008	8 6%	7 B%	B 3%	7 6%	7 8%	B 5%	9 8%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
8	2009	8 6%	7 8%	8 3%	7 6%	7 8%	8 5%	9 8%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
ធ្វី	2010	8 6%	78%	8 3%	7 6%	78%	8 5%	98%.	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
rojected	2011	8 6%	7 8%	8 3%	7.6%	7.8%	8 5%	98%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
. ŭ	2012	8 6%	7 8%	8 3%	7 6%	78%	8 5%	98%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
	2013	8 6%	7 8%	8 3%	7 6%	78%	8 5%	9 8%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
	2014	8 6%	7 B%	8 3%	7 6%	7 8%	8 5%	9 8%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%
	2015	8 6%	7.8%	8 3%	7 6%	7 8%	8 5%	98%	9 1%	_ 8 1%	8 1%	7 9%	8 4%	100 0%
Avg.	1996-2005	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ã.	2006-2015	8 6%	7 8%	8 3%	7 6%	7 8%	8 5%	98%	9 1%	8 1%	8 1%	7 9%	8 4%	100 0%

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Windom Monthly Non-Coincident Peak Demand (MW)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Watr Pk
	1996	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A							
	1997	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A							
	1998	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A							
<u></u>	1999	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A							
Historical	2000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A							
놣	2001	10 7	10 4	10 0	9 9	112	12 2	142	142	119	104	10 1	10 2	#N/A
Ï	2002	10 5	102	10 1	100	119	13 9	14 9	123	13 0	106	10 7	11 D	105
	2003	11 1	112	11 0	107	110	14 D	14 3	150	123	112	11 0	11 2	11 2
	2004	11 5	10 B	10 7	10 7	113	14 1	150	13 B	143	108	108	11.5	115
	2005	11 2	107	10 6	108	10 7	15 4	14 8	14 9	13 6	123	11 0	11.4	115
	2006	11 9	115	11 3	10 9	12 1	14 9	15.5	14.2	13 3	11 1	11 5	11 8	119
	2007	12 1	116	11 4	11 0	12 2	15 1	15 7	143	13 4	11 3	117	120	12 1
	2008	12 2	118	11 5	11 1	12 4	15 3	159	14 5	136	11.4	11 8	12 1	12 2
2	2009	12 3	119	117	112	12 5	15 5	16 1	147	138	115	11 9	122	123
Projected	2010	12 5	120	11 8	11 3	126	15 6	16 2	14 B	13 9	116	120	123	125
ö	2011	12 6	121	11 9	11 4	12 7	15 7	16 4	149	14 0	11 7	12 1	12 4	126
ř	2012	127	122	12 0	115	128	15 9	16 5	150	14 1	118	122	12 5	12 7
	2013	127	123	120	116	129	16 0	166	151	14 2	119	122	126	12.7
	2014	128	124	12 1	117,	130	16 1	167	152	14 3	120	12:3	126	128
	2015	129	12 4	12 2	11 7	13 1	16 2	16 8	<u> 15 3 </u>	14 4	120	124	12 7	129
	2016	13 0	12 5	12 2	11 8	13 1	16 2	16 9	15 4	14 5	12 1	12 4	12.8	13 0
	2017	13 0	125	12 3	119	13 2	16 3	17 0	155	145	122	125	128	13 0
	2018	13 1	126	12 3	11 9	13 2	16 4	17 0	155	146	122	12 5	129	13 1
8	2019	13 1	12 5	12 4	11 9	13 3	16 4	17 1	156	14 6	123	126	12 9	13 1
Projected	2020	13 2	127	12 4	12 0	133	15 5	17 1	156	14 7	123	126	129	13 2
ē	2021	13 2	127	12 4	12 0	13 4	16 5	17 2	157	14 7	123	126	13 0	13.2
Ē.	2022	13 2	127	12 5	12 0	13 4	16 6	17 2	157	14 7	12 4	127	13 0	13.2
	2023	13 3	128	12 5	12 1	13 4	16 6	17 2	157	148	12 4	127	13 0	133
	2024	13 3	128	12 5	12 1	13 5	16 6	17 3	158	148	12 4	127	13 0	13 3
	2025	13 3	128	12 6	12 1	135	16 7	17 3	15 8	148	12 4	127	13 1	133

Monthly Load Factors

	Year	Jan	feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dac	Wntr Pk
	1996													
	1997													
	1998													
T	1999													
Ĕ	2000													
Historical	2001	70 9%	73 8%	72 9%	69 5%	60 9%	58 9%	60 4%	57 3%	56 9%	67 9%	67 7%	70 3%	
王	2002	72 4%	72.7%	72 0%	69 5%	57 2%	59 1%	64 8%	67 8%	59 5%	72 5%	72 7%	70 8%	73 7%
	2003	74 6%	75 2%	74 0%	71 2%	68 9%	59 1%	65 2%	63 0%	64 5%	69 5%	70 5%	73 9%	73 7%
	2004	72 7%	75 6%	74 1%	69 3%	66 8%	59 1%	59 0%	58 2%	59 3%	71 6%	71 9%	69 8%	70 4%
	2005	74 7%	76 8%	75 2%	70 9%	70 2%	60 5%	64 9%	57 2%	61 9%	62 9%	70 B%	71 5%	72 2%
	2006	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 1%	68 7%	68 7%
	2007	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 0%	68 6%	68 7%
	2008	69 6%	69 6%	70 7%	69 4%	62 0%	57 0%	61 2%	61.8%	60 9%	70 2%	68 1%	68 7%	68 7%
'n	2009	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 3%	68 8%	68 7%
Projected	2010	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 3%	68 9%	68 7%
픙	2011	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 4%	68 9%	68 7%
ā.	2012	69 6%	69 6%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 4%	69 0%	68 7%
	2013	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61.8%	60 9%	70 2%	68 5%	69 0%	68 7%
	2014	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 5%	69 1%	68 7%
	2015	69 6%	72 1%	70 7%	69 4%	62 0%	57 0%	61 2%	61 8%	60 9%	70 2%	68 6%	69 1%	68 7%
B	1996-2005	73 1%	74 8%	73 6%	70 1%	64 8%	59 3%	62 9%	60 7%	60 4%	68 9%	70 7%	71 3%	72 5%
₹	2006-2015	69 6%	71 6%	70 7%	69 4%	62 0%	57 0%	61 2%	61.8%	60 9%	70 2%	68 3%	68 9%	68 7%

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Windom
Monthly Coincident-Peak Demand (MW)

_	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk S
	2006	114	11 2	110	10 4	11.5	14 7	147	136	13 1	10 7	11.2	114	11 4
	2007	115	113	11 1	10 5	116	14 8	14 9	13 7	13 3	108	11.4	116	11 5
	2008	117	114	11 3	10 6	118	15 0	15 1	13 9	13 4	110	115	117	11 7
꿊	2009	118	116	11 4	10 7	11 8	152 -	15 2	14 0	136	11 1	116	118	118
ថ្ល	2010	119	117	11 5	108	120	15 3	15 4	14 2	13 7	112	117	119	119
rojected	2011	120	118	116	10 9	12 1	15 5	15 5	14 3	13 8	113	118	120	120
ď.	2012	12 1	119	117	11 0	12 2	15 6	15 6	14 4	13 9	114	119	12 1	12 1
	2013	12 2	120	11 8	11 1	123	15 7	157	14 5	14 0	115	119	122	12 2
	2014	123	120	119	11 2	124	15 8	158	14 6	14 1	115	120	122	123
	2015	123	12 1	119	11 2	12 5	15 9	15 9	147	14 2	116	121	123	123
	2016	12 4	122	12 0	11 3	12 5	15 9	16 0	147	14 3	116	12 1	124	12 4
	2017	12 4	122	120	11 3	126	16 D	16 1	148	14 3	117	122	124	12 4
	2018	125	123	12 1	11 4	126	16 1	16 2	14 9	14 4	118	122	124	125
8	2019	125	123	12 1	11 4	127	16 1	16 2	14 9	14 4	118	122	125	12 5
ojected	2020	126	123	12 2	11.4	127	16 2	16 3	150	14 5	118	123	125	126
ř	2021	126	12 4	122	11.5	127	16 2	163	150	14 5	119	123	125	126
á.	2022	. 126	124	12 2	11 5	128	16 3	163	150	14 6	119	123	126	12 6
	2023	12 7	124	12 3	11 5	128	16 3	16 4	15 1	14 6	119	124	126	127
	2024	12 7	125	123	116	128	16 3	16 4	15 1	146	119	12 4	126	12 7
_	2025	12 7	125	12 3	11 6	129	16 4	16 4	15 1	14 7	120	124	127	127

Monthly Coincidence Factors

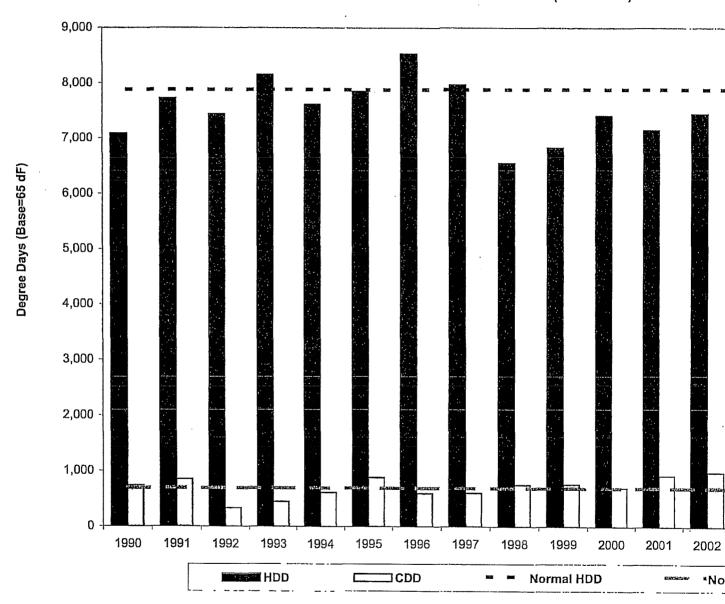
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Wntr Pk S
	2006	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
	2007	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97.5%	96 8%	95 5%
	2008	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
퍊	2009	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
ត្ត	2010	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
출	2011	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
ď.	2012	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	957%	98 7%	96 2%	97 5%	96 8%	95 5%
	2013	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
	2014	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
	2015	95 5%	97 4%	98 0%	95 6%	95 3%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%
	2006-2015	95 5%	97 4%	98 0%	95 6%	97 4%	98 2%	94 9%	95 7%	98 7%	96 2%	97 5%	96 8%	95 5%

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Appendix C HISTORICAL WEATHER DATA



Actual HDD & CDD v. 30-Year Normals (1971-2000)



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Monthly Heating and Cooling Degree Days - Minneapolis/St. Paul Airport Weather Sta

Year	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Heating D	egree Days	6									
1990	1,194	1,151	899	569	274	37	2	5	136	516	820
1991	1,621	1,129	945	481	197	3	7	8	228	548	1,206
1992	1,332	1,067	981	636	190	72	32	52	182	542	1,003
1993	1,557	1,335	1,096	617	243	70	3	18	302	566	1,025
1994	1,873	1,444	932	569	180	27	2	45	99	390	802
1995	1,433	1,273	924	678	247	47	6	0	201	511	1,123
1996	1,693	1,356	1,222	699	304	62	3	2	167	500	943
1997	1,688	1,255	1,100	653	351	6	27	26	113	483	1,101
1998	1,414	917	1,019	423	104	107	0	0	74	422	829
1999	1,625	1,034	958	422	171	76	0	2	174	471	690
2000	1,515	1,070	734	542	176	72	12	1	146	364	1,008
2001	1,386	1,483	1,155	497	197	54	8	2	162	505	552
2002	1,243	1,021	1,234	588	348	30	0	4	119	711	951
2003	1,532	1,372	1,037	505	228	30	0	0	175	441	979
2004	1,661	1,250	892	456	260	60	8	50	59	457	810
2005	1,525	1,073	1,022	394	268	0	0	3	61	416	845
Normal	1,616	1,279	1,034	560	222	44	7	20	178	516	978
Cooling D	egree Days	S									
1990	0	0	0	28	11	178	206	191	125	1	Ö
1991	0	0	0	8	109	246	238	205	51	0	0
1992	0	0	0	3	56	96	64	88	28	2	0
1993	0	0	0	0	12	60	176	195	8	0 .	0
1994	0	0	0	3	52	183	167	126	86	0	0
1995	0	0	0	0	3	240	264	308	63	9	0
1996	0	0	0	0	20	142	168	181	87	4	0
1997	0	0	0	0	1	163	222	150	41	33	0
1998	0	0	0	0	62	111	243	212	130	0	0
1999	0	0	0	0	28	151	357	166	64	0	0
2000	0	0	0	0	55	111	249	· 228	53	8	0
2001	0	0	0	8	38	184	351	293	46	2	0
2002	0	0	0	18	33	221	379	195	141	0	0
2003	0	0	0	13	8	130	278	326	108	16	0
2004	0	0	0	10	8	81	239	98	140	2	. 0
2005	0	0	0	7	6	263	372	217	106	30	0
Normal	0	0	0	4	41	146	259	190	56	3	0

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Appendix D BIG STONE II MEMBER ECONOMIC DATA



Table D - 1

Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Blue Earth (Faribalt County)

Mid-range Economic Case	Populatio	n (Ths.)	Household	is (Ths.)	Nonfa Employme		Manufac Employme		Gross Do Product (\$		Personal (\$M; \$	1996)	Personal lr Househol	d (\$1
	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	<u>%</u>
1992	166	- 1	6.7	- 1	46	-	1.48	-	251	-	318	-	47,592	
1993	16 6	-0 3%	6.7	-0 1%	4,5	-2.3%	1.35	-8 4%	242	-3.5%	278	-12 7%		
1994	16.6	-0.2%	6.7	0 1%	55	22.2%	1 4 1	4 1%	302	24 8%	328	17 8%		
1995	16.5	-0.2%	6.7	0 1%	5,6	1 4%	1.48	5.3%	310	2.5%	313	-4 4%		
1996	16 4	-0.7%	67	-0.4%	4.8	-14 5%	1 65	11.3%		-6 0%	349	11 6%		
1997	16.5	0 3%	6.7	0.6%	5.8	22 0%	1.64	-0 8%	374	28 4%	349	-0 1%		
1998	16.3	-0 9%	6.7	-0 7%	58	0,8%	1 59	-3 0%		2 5%	354	1.6%		
1999	16.3	-0 2%	67	0.1%	59	1.7%	163	2 7%	381	-0.6%	342	-3.6%		
2000	16.1	-0 9%	6.6	-0.6%	59	-0.1%		2 4%		3 5%	347	1.5%		
2001	16.0	-1 1%	6.6	-1 1%	56	-4.0%	1 57	-6.1%		-4 3%	334	-3 5%		
2002	159	-0 5%	6.5	-0 4%	6,0	6.4%		1.1%	1	11 6%	343	2 5%		
2003	157	-0.9%	65	-0 9%	58	-3 8%		-4 9%		2.2%	. 358	4.3%		
2004	15.7	-0.5%	65	-0 4%	5.9	1 8%	1	-4 4%	1	3.4%	368	2 8%		
2005	15.5	-1.0%	64	-0.9%	5.9	0.2%	1 44	0 1%		2 4%	371	0.8%	1	
2006	15.4	-0.6%	64	-0 3%		1.5%	1	1.2%		4 6%	1	1 8%		
2007	15.3	-0 5%	64	-0 2%		0 4%	ı	-0 6%		2 2%	380	0.8%		
2008	15.2	-0 6%	6.3	-0 2%	60	-0 1%	1	-1.1%		2 9%	384	1.0%	1	
2009	15.2	-0 6%	6.3	-0 2%	1	0.0%	1	-0 7%		27%	388	1 0%		
2010	15 1	-0 6%	6.3	-0 2%		-0 4%		-1 2%		2.2%	394	1 5%	· ·	
2011	15.0	-0 6%	6.3	-0 2%	i .	-0 3%		-1 2%		2 0%	399	1 3%		
2012	14.9	-0.6%	63	-0 2%	6.0	-0 1%	1	-1 2%		19%	1	1 7%		
2013	14.8	-D.6%		-0.2%		-0 3%	1	-1.3%		1 5%		1.7%		
2014	14 7	-0 6%		-0 2%	1	-0 4%	1	-1.3%	E	1.4%		1.5%		
2015	14.6	-0 6%	1	-0 3%		-0.6%		-1.4%		1 3%		1 3%		
2016	14.5	-0 6%		-0 3%		-0.9%	1	-1 6%		1.2%		1 4%		
2017	14.5	-0 5%		-0.3%		-1 0%		-1 6%	1	1 3%		1 4%		
2018	14.4	-0 5%	1	-0 3%		-0 9%		-1 7%		1 0%		1 4%		
2019	14.3	-0.5%		-0 3%		-0 9%	1	-1 8%	1	0.7%	1	1 5%	1 .	
2020	14 3	-0.5%		-0 3%	1	-0.9%	1	-1.8%		0.6%		1.5%		
2021	14 2	-0.5%	ı	-0 3%	1	-1.09		-1 99		0.5%		1 6%		
2022	14 1	-0 4%		-0 4%		-1 19		-1 9%		0.6%				
2023	14 1	-0 4%		-0 4%	1	-1 0%		-1 9%		0.7%	*	1 69		
2024	14.0	-0 4%		-0 4%	1	-0 9%		-1 9%		0.5%		1 69		
2025	14 0	-0 4%	60	-0 4%	5.3	-1 09	1 10	-2.0%	616	0 5%	493	1 69	81,609	3
Average Pero	ent Chang	е	1		1				1					
1995-2005		-0 6%		-0 5%	6	0 5%	6	-0 3%		3 9%		1 79		
2006-2015		-0 6%		-0 2%	6	-0.2%	6	-1 19	· •	2 0%	1	1 3%		
2016-2025		-0 5%		-0 4%	4	-1 0%	4	-1 89	6	0.7%	<u> </u>	1 5%	6	

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Table D - 2
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Delano (Wright County)

		·		1									
Mid-range					Nonf		Manufa		Gross De		Personal	Income	Personal Inc
Economic Case	Populatio	n (Ths.)	Household	ds (Ths.)	Employme		Employme	ent (Ths.)	Product (\$	M; \$1996)	(\$M; \$	1996)	Household (
	<u>Value</u>	% Chg	<u>Value</u>	% Chq	<u>Value</u>	% Chg	Value	% Chg	<u>Value</u>	<u>% Chq</u>	Value	% Chg	<u>Value</u>
1992	72.4		24 5	-	19 2	·_	2.58	_	1,006	-	1,477	-	60,357
1993	74.3	2.6%	25.2	3 1%	20 4	6.3%	2 96	14.7%	1,059	5 2%	1,509	2.2%	59,821
1994	76.3	2.6%	26 0	3 1%	21 8	7.0%	3 31	11.9%	1,160	9 6%	1,615	7.0%	62,137
1995	78 4	2 8%	26 8	3 3%	22 7	4.3%	3 59	8 7%	1,215	4 7%	1,677	3.8%	62,449
1996	80.9	3 2%	27 8	3 6%	23,9	5.0%	3 81	6.1%	1,340	10 2%	1,777	6 0%	63,894
1997	83.1	2 7%	28 7	3.1%	24 7	3.5%	3 99	4.6%	1,481	10.6%	1,883	5.9%	65,613
1998	85.1	2 4%	29.5	2 8%	26 3	6.4%	4 45	11.6%	1,661	12 2%	2,026	7 6%	68,682
1999	87 9	3 3%	30 6	3.7%	27.9	6.1%	4 78	7 4%	1,768	6.4%	2,148	6 0%	70,199
2000	90.8	3 3%	31 7	3 8%	29 6	5 9%	5 02	5 2%		7.3%	2,285	6 4%	71,977
2001	93 9	3 5%	32 9	3 5%	30 8	4 4%	4 96	-1 2%	1,961	3 4%	2,350	2 8%	71,489
2002	98 4	4 8%	34 5	4 9%	32.5	5.3%	4 82	-2.8%		8.1%	2,458	4 6%	71,317
2003	102 9	4 5%	36 0	4 6%	33.5	3.2%	4.69	-2.8%	2,247	6.0%	2,549	3.7%	70,707
2004	107.1	4 1%	37 5	4 1%	34.9	4.2%	5.06	8.0%	2,400	6.8%	2,737	7.4%	72,914
2005	110 7	3 4%	38 8	3 5%	36.1	3.3%	5.21	2.8%	,	5.0%	2,847	4 0%	73,277
2006	114 4	3 3%	40.3	3.9%	37.3	3 5%	5 38	3 4%		4.9%	2,957	3 9%	73,289
2007	118 0	3.2%	41.8	3 6%	38.6	3 3%	5.51	2 3%	2,763	4.5%	3,094	4 6%	73,990
2008	121.9	3 2%	43 4	3 7%	39.8	3 2%	5.62	2.1%	2,893	47%	3,221	4 1%	74,286
2009	125.7	3 1%	44.9	3.6%	41.2	3 7%	5 78	2 7%	3,030	4.7%	3,359	4.3%	74,752
2010	129,3	2.9%	46 5	3 4%	42.7	3 6%	5.92	2.5%	3,168	4.6%	3,497	4 1%	75,274
2011	132 8	2.7%	48 0	3.2%	44.1	3 4%	6.05	2.1%		4.3%	3,640	4 1%	75,901
2012	136 3	2 7%	49 5	3 2%	45.7	3.4%	6.17	2 0%		4.3%	3,788	4 1%	76,491
2013	139.8	2 6%	51 1	3 1%	47.2	3 3%	6,29	1 9%	3,587	4.1%	3,929	3.7%	76,928
2014	· 143.3	2 5%	52 6	3 0%	48.7	3 2%	6 42	2.0%	3,729	4.0%	4,068	3 5%	77,327
2015	146 8	2 4%	54 1	2 9%	50.2	3.1%	6.54	2 0%		3.9%	4,208	3 4%	77,750
2016	150.0	2 2%	55.5	2 6%	51.6	2.9%	6.68	2 1%	4,028	3.9%	4,345	3.3%	78,229
2017	153.3	2 2%	56 9	2 5%	53.1	2 8%	6.82	2 0%	4,186	3.9%	4,480	3 1%	78,693
2018	156.5	2 1%	58 3	2 4%	54 6	29%	6 94	1 8%		3.9%	4,616	3 0%	79,151
2019	159.8	2 1%	59 7	2.4%	56.2	2 9%	7.06	17%	4,517	3.9%	4,751	2 9%	79,564
2020	163.1	2 1%	61 1	2 3%	57.9	2.9%	7 17	1 6%	4,694	3.9%	4,889	2.9%	80,014
2021 2022	166.4	20%	62 4	2 2%	59.5	2.8%	7.29	1.6%	4,877	3.9%	5,028	2 9%	80,523
2022	169.6 172.9	19%	63 7 65 0	2 1%	61.1	26%	7.40	1.6%	5,068	3 9%	5,168	2 8%	81,077
1		1 9%	65 0	2 0%	62.7	26%	7.50	1.4%	5,266	3.9%	5,307	2 7%	81,651
2024 2025	176.0 179.3	1 8% 1 8%	66 2 67 4	1 9% 1 8%	64.3	26%	7.59	1.2%	5,470	3.9%	5,448	2 7%	82,273
			0/4	18%	65.9	2 5%	7 68	1 2%	5,686	3.9%	5,592	2 6%	82,926
Average Perce	ent Change		li .								•		
1995-2005		3 5%		3 8%		4 7%		3 8%		7.6%		5 4%	
2006-2015		28%		3.3%		3 3%		2 2%		4.3%		4 0%	
2016-2025		2 0%		2 2%		2 7%		1 6%		3.9%		2 8%	

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Table D - 3
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Fairfax (Renville County)

													
Mid-range Economic Case	Populatio		Househol		Nonfi Employme				Gross De Product (\$		Personal (\$M; \$		Personal Incon Household (\$*
	<u>Value</u>	% Chq	<u>Value</u>	% Chq	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	Value	% Chg	<u>Value %</u>
1992	17.5	-	68	-	5.7	-	1 09	_	255	-	352	-	52,008
1993	17.5	0.1%	6.8	03%	5.4	-4 5%	1 07	-16%	240	-6.0%	292	-16 9%	
1994	17.4	-0.7%	68	-0 4%	56	3.5%	1 06	-0.6%	280	16 7%	369	26 2%	
1995	17.4	-0.3%	6 B	0.0%	5.7	1.4%	1 06	-0 2%	283	1 1%	330	-10.6%	
1996	17 3	-0.3%	6.8	0.0%	48	-15.7%	1 19	12.0%	250	-11 5%	378	14 8%	
1997	17.3	-0.1%	68	0 2%	6.0	24.1%	1 23	2 9%	332	32 9%	365	-3 6%	
1998	17 2	-0 5%	6.8	-0.2%	61	16%	1 20	-1 8%	350	5 3%	382	4 6%	56,463
1999	17 2	-0 2%	68	0.0%	6.0	-1 6%	1.13	-5.8%	352	0.5%	374	-2 0%	55,308
2000	17 1	-0.1%	68	0 2%	6 1	. 1.7%	1.22	7 9%	369	4.7%	367	-1.9%	54,124
2001	16 9	-1 2%	67	-1 1%	60	-1 2%	1.10	-9.7%	357	-3 1%	361	-1.4%	53,947
2002	17.0	0 2%	67	0 2%	4.8	-20 3%	1 05	-4.8%	316	-11.5%	364	0.7%	54,202
2003	16.9	-0 7%	67	-0.6%	48	0 2%		-0 8%	330	4 3%	352	-3 3%	52,717
2004	16 7	-0.8%	66	-0 8%	54	13.7%	1 05	0 4%	382	15.8%	359	1 9%	54,149
2005	16 8	0 3%	66	0 4%	5 5	0 4%	1 05	0.4%	374	-2 1%	361	0 6%	54,292
2006	16.7	-0 3%	6.6	-0 1%	5.5	1.7%	1 06	1 2%	381	1.8%	364	1 0%	54,876
2007	16 6	-0.4%	66	0 0%	56	0 5%	1 06	-0.6%	387	1 7%	363	-0 4%	54,667
2008	16.6	-0.3%	6.6	0 0%	5.6	0 0%	1.05	-1 1%	398	2 8%	363	-0 1%	54,636
2009	16.5	-0.4%	66	0 0%	5.6	0 1%	1 04	-0 7%	409	2.7%	361	-0 5%	54,371
2010	16.5	-0.3%	66	0.1%	5.6	-0 3%	1 03	-1 1%	417	2 1%	360	-0.3%	54,189
2011	16.4	-0 3%	6.6	0.1%	5.6	-0.2%	1.02	-1 2%	426	2.1%	359	-0 2%	54,054
2012	16.4	-0 3%	67	0.1%	5.6	0.0%		-1 1%	434	1 9%	359	-0.2%	53,906
2013	16 3	-0 3%	6.7	0.1%	56	-0.2%	0 99	-1 3%	442	1 7%	358	-0 1%	53,779
2014	16 3	-0 3%	67	0.1%	5 5	-0.3%	0 98	-1 3%	448	1 5%	359	0 2%	53,837
2015	16 2	-0 3%	6.7	0 0%	55	-0.4%	0.97	-1 4%	455	1.4%	359	0 0%	53,802
2016	16 2	-0 3%	67	0 0%	5 5	-0.8%	0.95	-1 6%	460	1 2%	359	-0 1%	53,798
2017	16 1	-0.3%	67	0 0%	5 4	-0,8%	0.93	-1 6%	467	1 4%	358	-0 1%	53,755
2018	16 1	-0 3%	67	-0 1%	5.4	-0.8%	0.92	-1.7%	472	1 1%	358	-0 1%	53,740
2019	16 0	-0 3%	67	-0 1%	53	-0 8%	0.90	-1 8%	475	0.7%	357	-0 1%	53,730
2020	16 0	-0 2%	66	-0 1%	5.3	-0.8%	0.88	-1.9%	478	0.7%	357	0 0%	53,756
2021	159	-0 3%	6.6	-0 1%	53	-0 9%	0 87	-1.9%	481	0.6%	357	0.0%	53,815
2022	159	-0 3%	66	-0 2%	5 2	-1 0%	0.85	-2.0%	485	0.7%	357	0.0%	53,909
2023	15 8	-0 3%	6.6	-0 2%	5 2	-0 9%	0 83	-1.9%	488	0 8%	357	0.0%	54,037
2024	15.8	-0.2%	66	-0 3%	5 1	-0 8%	0 82	-2 0%	492	0 6%	357	0 0%	54,188
2025	15.8	-0.2%	66	-0 3%	5 1	-0 9%	0 80	-2 0%	495	0 6%	357	0 0%	54,342
Average Perce	ent Change												
1995-2005		-0 3%		-0 2%		-0 4%		-0 1%		28%		0 9%	
2006-2015		-0 3%		0 0%		-0 1%		-1 1%		2 0%		-0 2%	
2016-2025		-0 3%		-0 2%		-0 9%	•	-1 9%		0 8%		0.0%	

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Table D - 4
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Glencoe (McLeod County)

		 1	Ţ										
Mid-range			l		Nonfa		Manufac		Gross Do		Personal	Income	Personal Inco
Economic Case	Population		Household		Employme		Employme	nt (Ths.)	Product (\$8	M; \$1996)	(\$M; \$1	1996)	Household (\$
	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chq	<u>Value</u>
1992	32 6	-	12 1	- 1	16.4	-	7 39	-	718	.	698		57,503
1993	32 9	1 0%	12 3	15%	17.0	3 7%	7 85	6.2%		0 0%	687	-1.6%	
1994	33 2	0 8%	12 5	1.2%	17 0	0 3%	7.86	0 2%	755	5.1%	730	6.2%	
1995	33 4	0 6%	126	1.1%	17.4	2.4%	8 01	1.9%	778	3 0%	755	3.4%	
1996	33 9	1 5%	128	2.0%	18 8	8.0%	8.94	116%	883	13 5%	798	5 7%	
1997	34.1	0 6%	130	1 0%	19 1	13%	9.20	3.0%	986	11 7%	826	3.5%	
1998	34.6	1 3%	13 2	17%	19 1	0.2%	9 22	0.2%	1,063	7.8%	858	3 9%	
1999	34.9	1.1%	13.4	1.6%	18.5	-2 9%	8 36	-9 3%		-0.7%	873	1 8%	
2000	34.9	-0 2%	13 4	0.3%	17.7	-4.8%	7 33	-12 3%	1,070	1.4%	847	-2 9%	63,040
2001	35.3	1 1%	13 6	1 2%	17.4	-17%	6 68	-8 9%	1,049	-2 0%	820	-3.2%	60,276
2002	35.6	1 0%	13 8	11%	17.2	-0.9%	6 15	-7 9%	1,111	6.0%	840	2 5%	
2003	35 8	0 4%	13 8	0.5%	17.0	-1 0%	5 99	-2.6%	1,213	9 2%	849	1 0%	61,433
2004	36 2	1 1%	14.0	1 2%	17 8	4 7%	6 29	5.0%	1,324	9 1%	871	2 5%	62,239
2005	36 6	1 2%	14 2	1 3%	18 1	1 7%	6 39	1.6%	1,392	5 2%	889	2.2%	62,788
2006	36 9	0.8%	14 3	1 1%	18 6	2.9%	6.56	2.6%	1,457	4.6%	903	1 5%	
2007	37 2	0.8%	14 5	1 2%	19 0	1.8%	6.61	0.8%	1,526	4.8%	914	1.2%	63,061
2008	37 6	0.8%	14 7	1 2%	19.2	1 2%	6 63	0.3%	1,615	5.8%	922	0.9%	
2009	37.9	0.8%	14 B	1 2%	19.5	1 4%	6 68	0.7%	1,704	5.5%	929	0.7%	62,608
2010	38.2	0 8%	15 0	1.2%	19.6	0 9%	6 69	0 2%	1,789	5.0%	935	0.7%	62,268
2011	38.5	0 8%	15.2	1.3%	19.8	1 0%	6 71	0.2%	1,877	4 9%	943	0.9%	
2012	388	0 8%	15 4	1 2%	20 1	1.2%	6 72	0.2%	1,965	4 7%	955	1.2%	62,013
2013	39 1	0 8%	15.6	1.3%	20.3	1 0%	6 73	0.1%	2,050	4 3%	966	1.2%	61,984
2014	39.4	0 8%	15.8	1 2%	20 5	0 9%	6.73	0 0%	2,135	4 1%	978	1.2%	61,979
2015	39 7	0.8%	15.9	1.1%	20.6	0.7%	6 73	-0 1%	2,218	3.9%	988	1.1%	61,949
2016	40.0	0 8%	16 1	1 1%	20.7	0.4%	6 71	-0 2%	2,301	3.8%	999	1 1%	61,918
2017	40 4	0 8%	16.3	1,1%	20.7	0.3%	6 69	-0.3%	2,390	3.8%	1,008	1 0%	61,880
2018	40 7	0 8%	16 5	1.0%	20 8	0 3%	6 67	-0.4%	2,473	3 5%	1,018	1 0%	61,852
2019	41 0	0 8%	16 6	1.0%	20 9	0 3%	6.63	-0 5%	2,548	3.0%	1,028	1.0%	61,842
2020	41 3	0 8%	16.8	1 0%	20.9	0.2%	6.59	-0.6%	2,622	2 9%	1,039	1.0%	61,871
2021	41.6	0 8%	16.9	0 9%	20.9	0.2%	6.55	-0 7%	2,692	2.7%	1,049	10%	61,952
2022	41.9	0 8%	17 1	0 8%	20.9	0.0%	6 50	-0 7%	2,766	2.7%	1,060	1 0%	62,084
2023	42 3	0 7%	17 2	0 8%	21 0	0 1%	6 45	-0 7%	2,842	2.7%	1,000	1 0%	62,241
2024	42 6	0.7%	17 3	0 7%	21 0	0 1%	6 40	-0.8%	2,912	2 5%	1,082	1 0%	62,414
2025	42 9	0.7%	17 4	0.7%	21 0	0 1%	6 35	-0.8%	2,982	2 4%	1,092	1 0%	62,599
Average Perce	nt Change										.,		
1995-2005	_	0.9%		1.2%		0.4%		-2 2%		6 001		,	
2006-2015		0.5%		1.2%		1.1%		-2 2% 0.3%		6 0%		17%	
2016-2015		0 8%		0.2%		0.2%		-0.6%		4.8%		10%	
		70		23/8	***************************************	0 270		-0.0%		2.9%		1 0%	-

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Table D - 5
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Granite Falls (Yellow Medicine County)

Mid-range Economic Case	Populatio		Household		Nonf Employme	ent (Ths.)	Manufas Employms		Gross De Product (\$		Personal (\$M; \$		Personal ir Househol	
	<u>Value</u>	% Chg	<u>Value</u>	% Chq	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chq	Value	% Chg	<u>Value</u>	9
1992	116	-	4.6	-	39	-	0 52	-	200	-	204	-	44,397	
1993	11 6	0 1%	4.6	0 3%	43	9 9%	0 54	2.7%	216	7 9%	176	-13 4%		
1994	11,6	-0 1%	4.6	0 1%	39	-10 1%	0 50	-7.5%	195	-9 7%	219	24 2%		
1995	11.5	-0 5%	4.6	-0 3%	4.0	1 7%	0 56	13 2%	196	0.6%	205	-6 2%	44,759	
1996	11 5	-0 5%	4.6	-0 4%	4.1	3.5%	0.58	3 4%	211	7 8%	238	16 0%	52,108	
1997	11.5	0 1%	4.6	0 3%	4.1	0.6%	0 59	1 7%	225	6 7%	227	-4 8%	49,499	
1998	11 3	-1 7%	4.5	-1 5%	4 2	2.9%	0.66	11 7%	236	4 8%	233	2.7%		
1999	11 2	-1.0%	4 5	-0.8%	4.2	-0.6%	0.63	-4 0%	232	-1 8%	229	-1 8%	51,115	
2000	11.0	-1 3%	4.4	-1 2%	4 3	1 3%	0.66	4.6%	242	4 4%	230	0.5%	51,989	
2001	11.0	-0 8%	4 4	-0.8%	4.1	-3.1%	0.48	-28 2%	231	-4 8%	220	-4.4%	50,070	
2002	10.8	-1 3%	43	-1 3%	4.2	0.2%	0.52	9 8%	240	4 1%	216	-1 7%	49,834	
2003	10.7	-1.0%	43	-0 9%	42	-0.1%	0 32	-38 4%	242	0.8%	221	2.2%	51,413	
2004	10.6	-1 3%	42	-1.3%	43	3 3%	0.34	5 6%	243	0 5%	226	2.2%	53,202	
2005	10.4	-1 0%	42	-1 0%	4.3	0 0%	0 34	-0 2%	259	6 5%	227	0.4%	53,936	
2006	10.4	-0.8%	42	-0 5%	4 3	1 3%	0 34	1 1%	263	1.6%	230	1 3%	54,929	
2007	10.3	-0.8%	4 2	-0 5%	4.4	0.2%	0 34	-0 9%	267	1.6%	229	-0.2%	55,096	
2008	10.2	-0 8%	4.1	-0 5%	4 3	-0.4%	0 33	-1.5%	273	2 2%	230	0 3%	55,558	
2009	10 1	-0.9%	4.1	-0 5%	4 3	-0 3%	0 33	-1.1%	279	2 0%	230	0 1%	55,872	
2010	10.0	-0 9%	4.1	-0 5%	4 3	-0 7%	0 33	-1 5%	283	1 5%	231	0.2%	56,279	
2011	9,9	-0 9%	4.1	-0 5%	4 3	-0 6%	0.32	-1.6%	287	1 4%	231	0.0%	56,585	
2012	98	-0 9%	4.1	-0 5%	4.3	-0.5%	0 32	-1.6%	290	1 2%	232	0 4%	57,114	
2013	97	-1 0%	40	-0 5%	4.2	-0.6%	0.31	-1 8%	293	0 9%	233	0 7%	57,792	
2014	97	-0 9%	4.0	-0 5%	4.2	-0 7%	0 30	-1 7%	295	0 9%	235	0 6%	58,419	
2015	. 96	-0 9%	- 40	-0,5%	4 2	-0 B%	0.30	-1 7%	298	0 8%	235	0 4%	58,964	
2016	95	-0 8%	4.0	-0.5%	4.1	-1 1%	0.29	-1 8%	. 300	0 8%	237	0 5%	59,541	
2017 2018	9.4	-0 8%	40	-0.5%	4.1	-1.2%	0 29	-1 8%	303	1.0%	237	0.4%	60,093	
2018	9.4 9.3	-0 7%	39	-0.5%	4.0	-1 1%	0 28	-1 9%	305	0.7%	239	0 5%	60,701	
2019	9.3 9.2	-0 7%	39	-0.5%	40	-1 1%	Q 2B	-2 0%	306	0.4%	240	0 5%	61,330	
2020		-0 7%	3.9	-0.5%	3.9	-1.1%	0 27	-2 0%	307	0.4%	241	0.6%	62,006	
	9.2	-0 6%	39	-0 5%	39	-1 1%	0 27	-2.1%	308	0.3%	243	0.7%	62,727	•
2022	91	-0 6%	39	-0 5%	38	-1 2%	0.26	-2 1%	310	0.4%	245	0.7%	63,514	
2023 2024	91 90	-0 6%	38	-0.6%	3.8	-1 1%	0 26	-2 1%	311	0.5%	247	0 7%	64,342	
2024	90	-0 6%	38	-0.6%	3.B	-1.1%	0 25	-2.1%	312	0.3%	248	0 7%	65,185	
		-0 5%	38	-0 6%	37	-1 1%	0 24	-2.2%	313	0 3%	250	0.7%	66,046	
Average Perce	int Unange	4 004		2000										
1995-2005		-1 0%		-0 9%		0 8%		-4 9%		28%		1 0%		
2006-2015		-0 9%		-0 5%		-0 5%		-1 5%		1 4%		0 3%		
2016-2025		-0 6%	· · · · · · · · · · · · · · · · · · ·	-0 5%		-1 1%	~~~	-2 0%		0 5%		0 6%		

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Table D - 6
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Janesville (Waseca County)

				-	T				1				r
Mid-range					Nonf	arm	Manufa	cluring	Gross De	omestic	Personal	Income	Personal Inco
Economic Case	Populatio	n (Ths.)	Househol	ds (Ths.)	Employme	ent (Ths.)	Employm	ent (Ths.)	Product (\$	M; \$1996)			Household (
	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	Value	% Chg	Value	% Chg	Value	% Chq	<u>Value</u>
1992	18.2		67	-	6 2	-	1 55	-	314	-	343	-	51,305
1993	18 0	-1 3%	66	-1 5%	61	-1 8%	1.48	-4.5%	302	-3.9%	315	-8 0%	
1994	18.0	-0.1%	66	-0 3%	7.1	16 6%	1.46	-1.4%	359	18 7%	363	15 0%	55,281
1995	18.2	1 1%	66	0 9%	76	7 2%	1.67	14 3%	381	6 1%	358	-1 2%	54,120
1996	18 3	0.7%	6.7	0.5%	6.8	-10 3%	1.63	-2.1%	357	-6.3%	391	9 1%	58,727
1997	18.7	2 5%	68	2.3%	6.9	2.1%	1 57	-3 5%	396	11 2%	404	3 3%	59,286
1998	18 8	0 3%	68	0 1%	69	-0.4%	1 49	-5.7%	417	5 2%	423	4 7%	62,004
1999	19 5	3 6%	7 1	3 4%	69	0 5%	1.43	-3.7%	430	3 2%	411	-2 7%	58,319
2000	19 5	0 3%	7 1	0 1%	70	0 7%	1.53	7 0%	428	-0.4%	416	1 2%	58,945
2001	19.5	-0.2%	7 1	-0 1%	7 1	1 9%	1.42	-7.0%	444	3 7%	413	-0 8%	58,560
2002	19 5	0 2%	7 1	0 3%	70	-1 0%	1.35	-5.3%	474	6 8%	413	0.1%	58,436
2003	19 4	-0.5%	70	-0.4%	7.1	0,5%	1.33	-1.3%	508	7.0%	423	2 4%	60,078
2004	19.3	-0 8%	70	-0 7%	85	20 5%	1.41	6.0%	627	23 6%	430	1.6%	61,465
2005	19.3	0 2%	70	0 2%	87	1 3%	1.43	1.5%	640	2 1%	435	1 2%	62,085
2006	19.4	0 4%	71	0.7%	8.9	2.5%	1.46	2.1%	669	4.5%	443	18%	62,739
2007	19 5	0 4%	71	0 7%	90	1.3%	1.46	0.0%	697	4.2%	448	1.0%	62,908
2008	19.6	0 4%	7 2	0 8%	91	0 9%	1.45	-0.5%	730	4 7%	452	10%	63,060
2009	19 7	0.5%	72	0 9%	9.2	1 1%	1 45	0 1%	764	4 7%	456	0 9%	63,005
2010	19.8	0 6%	7.3	1 0%	92	0 7%	1 45	-0.2%	796	4 1%	463	1 6%	63,343
2011	19 9	0.6%	7.4	1.0%	9.3	0 8%	1 45	-0.3%	827	4 0%	470	1 4%	63,618
2012	20 0	0 5%	7 5	1.0%	9.4	0.9%	1.44	-0.3%	859	3.8%	477	1 5%	63,943
2013	20 1	0 4%	7.5	0.9%	9.5	0 7%	1 43	-0 5%	887	3 3%	485	1 6%	64,390
2014	20 2	0 4%	76	0.9%	9.5	0.6%	1 43	-0.6%	916	3.2%	492	1 5%	64,771
2015	20.2	0 2%	7.6	0.6%	9.5	0 2%	1.41	-0 9%	941	2.8%	497	1.1%	65,106
2016	20 3	0 2%	77	0.5%	9.5	-0 1%	1 40	-1 1%	965	2 6%	503	11%	65,476
2017	20 3	0 3%	77	0.5%	9.5	-0.2%	1.38	-1 2%	991	2.7%	508	1.1%	65,842
2018	20 4	0 3%	7.8	0 5%	9 5	-0 1%	1 36	-1 2%	1,015	2.4%	514	11%	66,244
2019	20 4	0 3%	78	0 5%	95	-0 1%	1 35	-1 2%	1,037	2 1%	520	1.2%	66,678
2020	20 5	0 4%	78	0.6%	95	-0.1%	1 33	-1 3%	1,058	2 0%	527	1 3%	67,179
2021	20.6	0 4%	79	0 5%	95	-0.2%	1 31	-1 4%	1,078	1 9%	534	1 3%	67,715
2022	20.7	0 4%	7.9	0.5%	94	-0 3%	1.29	-1.5%	1,098	1 9%	541	1 3%	68,302
2023	20.8	0.4%	80	0 4%	94	-0 2%	1.28	-1.4%	1,120	2 0%	548	1 3%	68,931
2024	20 8	0.4%	8,0	0 4%	9.4	-0.2%	1.26	-1.5%	1,139	1 8%	556	1 3%	69,577
2025	20 9	0.4%	8.0	0 3%	94	-0.2%	1.24	-1.5%	1,159	1 7%	563	1.3%	70,244
Average Perce	ent Change												
1995-2005		0.6%		0.6%		1 3%		-1 5%		5 3%		2 0%	
2006-2015		0.5%		0.9%		0 8%		-0 3%		3 9%		1 3%	
2016-2025		0.3%		0 5%		-0.2%		-1 3%		2.0%		1 3%	

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Table D - 6
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Janesville (Waseca County)

									1				
Mid-range Economic Case	Populatio	• •	Household		Nonf Employme		Manufac Employme	_	Gross D Product (\$		Personal (\$M; \$		Personal Inco Household (\$
1	<u>Value</u>	% Chq	<u>Value</u>	% Chg	<u>Value</u>	% Chg	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chq	<u>Value</u> 9
1992	18 2	-	6.7	-	62	-	1 55	-	314	-	343	-	51,305
1993	18.0	-1 3%	66	-1 5%	6 1	-1 8%	1 48	-4 5%	302	-3.9%	315	-8.0%	47,918
1994	18.0	-0.1%	6.6	-0.3%	7 1	16 6%		-1 4%	359	18 7%	363	15.0%	55,281
1995	18.2	1 1%	6.6	0 9%	76	7 2%	1 67	14 3%	381	6 1%	358	-1 2%	54,120
1996	18 3	0 7%	67	0 5%	6.8	-10.3%	1	-2.1%	357	-6 3%	391	9 1%	
1997	18 7	2 5%	68	2 3%	6.9	2 1%	1.57	-3.5%	396	11 2%	404	3 3%	
1998	18.8	0.3%	68	0 1%	69	-0.4%	1 49	-5.7%	417	5.2%	423	4 7%	
1999	19.5	3.6%	7.1	3 4%	69	0.5%	1 43	-3.7%	430	3.2%	411	-2 7%	58,319
2000	19 5	0.3%	71	0 1%	70	0.7%	1 53	7.0%	428	-0 4%	416	1.2%	
2001	19 5	-0 2%	7.1	-0 1%	71	1.9%		-7 0%	444	3 7%	413	-0.8%	
2002	19 5	0.2%	71	0.3%	7.0	-1.0%	1	-5 3%	474	6 8%	413	0 1%	'
2003	19 4	-0 5%	70	-0.4%	7.1	0.5%		-1 3%	508	7 0%	423	2 4%	
2004	19 3	-0 8%	70	-0.7%	85	20.5%	l .	6.0%	627	23 6%	430	16%	
2005	19 3	0.2%		0.2%	8.7	1 3%	1 43	1 5%	640	2 1%	435	1 2%	•
2006	19 4	0.4%	71	0.7%	8.9	2.5%	1.46	2 1%	669	4.5%	443	1 8%	
2007	19 5	0.4%	71	0.7%	9.0	1.3%	1 46	0 0%	697	4 2%	448	1 0%	1,
2008	19 6	0.4%		0 8%		0.9%	1 45	-0.5%	730	47%	452	1 0%	, ,
2009	19.7	0 5%	72	0.9%	9.2	1 1%		0 1%	764	4 7%	456	0 9%	
2010	19 8	0.6%	73	1.0%	92	0.7%		-0.2%	. 796	4.1%	463	1 6%	1
2011	19.9	0.6%	7.4	1.0%	93	0.8%	1 45	-0.3%	827	4.0%	470	1 4%	,
2012	20 0	0.5%	75	1.0%		0.9%	1 44	-0.3%	859	3.8%	477	1 5%	
2013	20,1	0.4%	75	0.9%	9.5	0.7%	1 43	-0.5%	887	3 3%	485	1 6%	
2014	20 2	0.4%		0.9%	9.5	0.6%	1 43	-0.6%	916	3 2%	492	1 5%	
2015	20 2	0.2%	76	0.6%		0.2%	1 41	-0.9%		2 8%	497	1.1%	,
2016	20.3	0.2%		0.5%		-0.1%	1 40	-1.1%	965	2 6%	503	11%	
2017	20 3	0 3%	77	0.5%		-0.2%	1 38	-1.2%	991	2.7%	508	11%	
2018	20.4	0.3%	78	0.5%		-0.1%		-1.2%	1,015	2 4%	514	1 1%	
2019 2020	20 4	0.3%	78	0.5%		-0.1%	1 35	-1 2%	1,037	2 1%	520	1 2%	, ,
2020	20 5 20 6	0.4% 0.4%	7 8 7.9	0.6%		-0.1%	,	-1.3%		2 0%	527	1 3%	
2021	20 6	0.4%	7.9	0.5%	9.5	-0.2%		-1.4%	1,078	1.9%	534	1.3%	
2022	20 7 20 8	0.4%	80	0.5%	9.4	-0.3%	1 29	-1 5%	1,098	19%	541	1 3%	
2023	20 8	0.4%	80	0.4% 0.4%	9.4 9.4	-0 2%	1.28	-1.4%		2 0%	548	1 3%	
2024	20 8	0.4%	80	0.4%	9.4 9.4	-0.2%	1 26 1 24	-1 5%	1,139	18%	556	1 3%	•
			80	0.5%	9.4	-0.2%	1 24	-1.5%	1,159	1 7%	563	1.3%	70,244
Average Perce	ent Change						1						
1995-2005		0 6%	ì	0.6%		1 3%	ŀ	-1 5%		5 3%		2 0%	
2006-2015		0 5%		0.9%		0.8%		-0 3%		3 9%		1 3%	
2016-2025		0 3%		0.5%		-0 2%		-1 3%		2 0%		1 3%	

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Table D - 7
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Kasson (Dodge County)

Mid-range					Nonfa	arm	Manufac	cturing	Gross De	omestic	Personal	Income	Personal Inc	cor
Economic Case	Populatio		Househol		Employme			ent (Ths.)	Product (\$	M; \$1996)		1996)	Household	
	<u>Value</u>	% Chg	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chq	Value	<u>% Chg</u>	<u>Value</u>	% Chq	<u>Value</u>	2
1992	16.2	-	57	-	28	-	0 68	· -	152	-	317	-	55,287	
1993	16.4	1 4%	. 5.8	17%	2.9	4 5%	0 82	20 4%		-0 8%	302	-4 8%	51,751	
1994	16.5	0 6%	59	0 9%	. 4.2	42.0%	0 94	13 9%		40.1%	336	11 1%	56,991	
1995	16 7	0 8%	6.0	1 1%	4.2	1.7%	0.93	-0 4%		1.8%	331	-1.3%		
1996	16 8	0 7%	6.0	1 0%	. 32	-24.3%	0.94	0 3%		-15.9%	356	7 4%		
1997	17 0	1 5%	61	17%	44	35 9%	0.90	-4 0%		40.5%	373	4 8%		
1998	17 1	0.6%	62	0 8%	4 5	2.8%	0.99	10.5%	1	7.2%	406	8 9%	1	
1999	17 4	1 4%	6.3	1.7%	48	6.1%	1.09	9.9%		3.2%	416	2 6%		
2000	17.9	2.7%	65	3.0%	50	4 4%	1.15	5.5%		8 5%	430	3 2%		
2001	18 2	1 7%	66	18%	51	1 9%	1 04	-9.8%	304	-0 7%	445	3.6%		
2002	186	2.4%	6.7	2 5%	51	0.8%	1 04	-0 2%		4 9%	471	5.9%	,	
2003	18 9	1 9%	6.9	1 9%	50	-2.3%	1 05	1 2%	4	3 9%	478	-1.3%		
2004	19.4	2 2%	7.0	2 2%	53	6 1%	1 26	19 7%		11 2%	501	5 0%		
2005	19.6	1 2%	71	1 3%	54	1 5%	1 28	1.6%		5.6%	509	1 5%		
2006	20.0	2 0%	73	2 4%		18%	1.30	2.1%		2.1%	516	1 4%		
2007	20 3	1 8%	7.4	2 2%	56	2.1%	1.32	1 5%		3.1%	525	1.8%		
2008	20.7	1.6%	76	2.0%	57	1.5%	1.34	1 0%		2.1%	532	1 3%	,	
2009	21 0	1.5%	77	1.9%	. 58	2 0%	1.36	1.6%		2 2%	541	1 7%		
2010 2011	21 3	1.4% 1.3%	79 80	1 8%	59	1 9%	1.38	1.5%		2 0%	548	1.4%	,,	
2011	21.6 21.8	13%		1 8% 1 8%	6,0 61	1 8%	1 40	1.2%		1 9%	556	1 5%	. ,	
2012	21.8	1 2%	8.2 8.3	17%	62	2.0%	141	1 2%		2 1%	565	1.6%		
2013	22.4	1.2%		16%		1 9%	1 43	1.1%	i	1.9%	573	1 4%		
2014	22.4 22.6	1.1%		1 5%		1.8% 1.8%	1.45 1.47	1.2% 1.3%		2.0%	580	1 2%		
2016	22.9	1.1%	87	13%	6.6		1.47		1	2.1%	587	1.2%		
2017	23.1	10%		13%		1 7% 1 7%	1 51	1.5% 1.5%		2 2%	594	11%		
2018	23.1	10%	8.9	13%		1.8%	1 53	1.4%		2 3% 2 4%	600 607	1.1% 1.1%		
2019	23.5	10%	90	13%	69	1.8%	1 55	1.4%		24%	613	1.1%		
2020	23 8	10%		1.2%	70	1.8%	1 57	1 2%		2 4%	619	10%		
2021	24 D	1.0%		1.2%		18%	1.59	1.2%	1	2.5%	625	10%		
2022	24.3	1.0%	93	1.1%	73	1.6%	1 61	1.2%		2.5%	631	0 9%		
2023	24.5	1 0%	1	1.0%	1	1.6%	1.62	1 0%	l .	2.6%	637	09%	. ,	
2024	24.8	10%		0.9%		16%	1.64	0 9%		2.0%	642	0.9%		
2025	25.0	10%		0.9%		15%	1 65	08%	614	27%	648	0.9%		
Average Perc						. 370							3,,535	
1995-2005		1.6%		1 8%		2 4%		3 2%		6.1%		4 4%		٧.
2006-2015		1 4%		1.8%		1.9%		1 3%		2.2%	Ì	15%		
2016-2025		1.0%		11%		1.7%		1.2%		2.5%		1 0%		

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Table D - 8
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Kenyon (Goodhue County)

Mid-range Economic Case	Populatio	n /The \	Household	de /The \	Nonf Employme		Manufac		Gross Do		Personal		Personal Incom
CCOMMING CASS	·										(\$M; \$		Household (\$
	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chq	<u>Value</u>	% Chg	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>
1992	41 4	-	15 6	-	19 1	-	4 19	-	988	-	918	-	58,993
1993	42.0	1 5%	15 8	1 9%	19.9	4.0%	4.43	5 7%	1	-1 0%	909	-1 0%	
1994	42.3	0.6%	16 0	0 9%	198	-0 7%	4 51	17%		1.7%	955	5 1%	
1995	42.6	0.7%	16.1	1 0%	20 1	1 7%	4 65	3 1%		3 2%	961	0 6%	
1996	42.8	0 6%	163	0 9%	20 7	3 1%	4 79	3 0%		6.9%	1,018	5 9%	
1997	43 3	1 2%	16.5	1.5%	20.9	0.7%	5 20	8 7%	1,177	7.1%	1,046	2 7%	
1998	43.8	1 0%		1 3%	21 6	3 6%	5 11	-1 8%		6.4%	1,098	4.9%	
1999	44.0	0.4%	16 9	0 7%	21 1	-2.5%	4 82	-5.7%		-3 0%	1,102	0.4%	
2000	44 2	0 4%	170	0.7%	21 5	19%	4 83	0.2%		2 5%	1,112	0 9%	
2001	44 6	1.1%	17 2	1 1%	21 7	1.0%	4 63	-4 1%		1.6%	1,132	1.8%	
2002	45.0	0.8%	17,3	0.8%	21 2	-2.3%	4 43	-4.2%	1 '	4 3%	1,164	2.8%	
2003	45 2	0 5%	17 4	0.5%	20 9	-1.5%	4 14	-6 6%		1.3%	1,168	0.4%	
2004	45 5	0.7%	17 6	0 8%	22 1	6.1%	4.05	-2 1%		6 0%	1,198	2.6%	
2005	45 6	0.2%	17.6	0.3%	22 5	1.6%	4 11.	1 5%		6 8%	1,220	1.8%	
2006	45.9	0.7%	17.8	. 10%	23 1	2.8%	4 21	2 5%		3.0%	1,249	2.4%	
2007	46 2	0.7%	180	1.0%		1.7%	4 24	0 5%	1,597	2.5%	1,274	2.0%	
2008	46 5	0.7%	18 1	1.0%		1.1%	4 23	0 0%		3 2%	1,299	2 0%	
2009	46.8	0.6%	18 3	1 0%		1.3%	4 25	0 4%		3 0%	1,321	1.7%	
2010	47 1	0 6%	18 5	11%		0.8%	4.25	0.0%		2 4%	1,346	1.9%	
2011	47.4	0.6%	187	1.1%		0.9%	4 24	-0 1%		2 4%	1,371	1.9%	,
2012	47 8	0 6%	189	1.1%		1.1%	4.24	-0.1%		2.2%	1,397	1 9%	
2013	48 1	0 6%		11%		0.9%	4 23	-0.2%	1,854	1.9%	1,422	1 8%	74,371
2014	48 3	0 6%		1.0%		0.8%	4 22	-0 3%		1 8%	1,450	2.0%	,
2015	48 6	0 6%		10%	i .	0.7%	4 21	-0 3%		1 7%	1,478	1.9%	75,785
2016	48.9	0.6%		0 9%		0.3%	4 19	-0 5%	1 '	1 6%	1,506	1 9%	76,533
2017	49 2	0.6%		0.8%		0.2%	4 16	-0.6%		1.7%	1,534	1.8%	77,284
2018	49 5	0 6%		0.8%		0.2%	4 13	-0 7%		1 4%	1,562	18%	
2019 2020	49 8	0.6% 0.6%		0.8%	25 6	0.2%	4 10	-0 8%	, ,	1 1%	1,590	1.8%	78,859
	50 1			0.8%		0.2%	4 06	-0 9%	'	1 1%	1,619	1.8%	79,705
2021 2022	50 4	0 6% 0 6%		0.7%		0.1%	4.03	-1.0%		1.0%	1,650	1.9%	80,599
2022	50.7	0.6%		0.7%		-0.1%	3 98	-1 0%		1 1%	1,680	1.9%	81,556
2023	51 0	0.6%		0.6%		0.0%	3 94	-1.0%		1 2%	1,711	1.9%	82,574
2024 2025	51 3 51 5	06%		.0 6% 0 5%	25 6 25.6	0.1% 0.0%	3 90 3 86	-1 1% -1 1%		1.1% 1.1%	1,743 1,775	1.9% 1.8%	83,640
Average Perc			203	0 0 70	20.0	0.078	3 00	-1 170	2,1/3	1.1%	1,110	1.0%	84,739
1995-2005	ent change	07%		0 9%		1 1%		-1 2%		4 On		D 404	
2006-2015		0.6%		10%		1 1%		-1 2% 0 0%		4 0%		2.4%	
2016-2025		06%		0.7%		0 1%		-0 9%		2 3% 1 2%		1.9%	
2010-2023		U U 70	L	u / 70	<u> </u>	U 17a		-0 9%	l	12%		1 8%	

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Table D - 9
Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Mountain Lake (Cottonwood County)

									i -		, ,		
Mid-range Economic Case	Populatio		Househol		Nonf Employm	ent (Ths.)	Manufa Employme	ent (Ths.)	Gross Di Product (\$		Personal (\$M; \$		Personal Inco
	<u>Value</u>	% Chg	Value	% Chg	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	Value
1992	12.6	-	50	-	48	-	0 75	-	227	-	237	<u>.</u> .	47,211
1993	12 6	0.1%	50	0 3%	5 1	6 9%	1,01	35 4%	1	3.3%	202	-15 0%	
1994	12 6	0 1%	51	0 2%	48	-5.1%	1 05	4.3%	235	0.3%	253	25 5%	1 - +
1995	12.6	-0.3%	50	-0 2%	4.7	-3.1%	0 75	-28.5%		-1 4%		-8 0%	
1996	12.5	-0.7%	50	-0 6%	4.7	1.4%	0.69	-8.5%	249	7.2%	264	13 4%	1 ''
1997	12.4	-1.0%	5.0	-0 8%	4.9	2 9%	0.75	9.5%	278	11 6%	262	-1 0%	
1998	12 3	-0.5%	5.0	-0.4%	44	-9 5%	0.65	-14 3%	254	-8 7%	271	3 4%	
1999	123	-0 3%	4 9	-0 2%	4.6	3 5%	0.80	23.2%	254	0.1%	257	-5.0%	
2000	12 1	-0 9%	4 9	-0.8%	46	0 4%	071	-10.6%	260	2 4%	257	0.0%	
2001	12 1	-0 7%	4.9	-0.6%	48	4 6%	0 93	30.6%	278	6 7%	250	-2 8%	
2002	120	-0 4%	49	-0.3%	48	0 6%	0 86	-7.9%	291	4 6%	253	1.3%	
2003	11 9	-0.5%	48	-0 4%	5 1	5 8%	1 37	59 3%	336	15 4%	266	5 2%	1 '
2004	12 0	0 0%	48	0 1%	51	0 2%	1 40	2.6%	339	0 9%	276	3.8%	
2005	11 8	-1.0%	4 8	-0 9%	5 1	0.3%	1 40	0 2%	356	4.9%	278	0.6%	
2006	11.8	-0.5%	4 8	-0 2%	5.2	1.6%	1 42	1.3%	364	2.3%	283	2 0%	
2007	11.7	-0.4%	48	-0.1%	5.3	0 6%	1.42	-D 4%	372	2 4%	286	0 9%	
2008	117	-0 5%	48	-0 1%	5.3	0 0%	1.40	-1 1%	383	3 0%	289	0 9%	60,387
2009	11 6	-0 5%	48	-0.1%	53	0.1%	1 39	-0.7%	394	2 7%	291	0.7%	60,901
2010	11 6	-0 5%	4 8	-0.1%	5 2	-0 4%	1 38	-1.1%	402	2 2%	294	1.3%	
2011	11 5	-0.5%	4 B	-0 1%	5 2	-0 2%	1.36	-1.1%	411	2 1%	298	13%	62,644
2012	11 4	-0.5%	48	-0 1%	5 2	-0 1%	1 35	-1.1%	419	2.0%	303	17%	
2013	11.4	-0.5%	48	0 0%	5 2	-0 1%	1 33	-1 2%	426	1.7%	309	18%	
2014	11 3	-0.5%	4.7	-0 1%	5.2	-0.3%	1 32	-1 2%	433	1 5%	313	15%	65,947
2015	11 3	-0 5%	47	-0 1%	5.2	-0 4%	1.30	-1 3%	439	1 4%	317	1.3%	66,906
2016	11 2	-0.4%	4 7	-0 1%	5 2	-0 7%	1 28	-1.5%	444	1 2%	322	1 4%	67,934
2017	11 2	-0.4%	4 7	-0 1%	5 1	-0 8%	1 26	-1.5%	450	1 4%	326	1 4%	68,956
2018	11 2	-0.4%	47	-0.2%	51	-0 7%	1.24	-1.5%	455	1.1%	·331	14%	
2019	11 1	-0.4%	47	-0 2%	5 0	-0 7%	1 22	-1 6%	459	0.8%	336	1 5%	
2020	11 1	-0.4%	4.7	-0 2%	5.0	-0.8%	1 20	-1.7%	462	0.7%	341	1 5%	72,436
2021	11 0	-0 3%	47	-0.2%	5 0	-0.9%	1 18	-1.8%	465	0.6%	346	1 6%	73,735
2022	11 0	-0 3%	4.7	-0 3%	4.9	-10%	1 16	-1 9%	468	0.7%	352	1.6%	75,107
2023	11 0	-0 3%	4.7	-0 3%	4.9	-0.9%	1 14	-1.8%	471	0 7%	357	16%	76,528
2024	10 9	-0.3%	47	-0.3%	4 8	-0 8%	1 11	-1.8%	474	0.6%	363	1 5%	77,973
2025	10 9	-0 3%	4 6	-0 4%	48	-0 9%	1 09	-1 9%	477	0 6%	368	16%	79,461
Average Perce	nt Change												
1995-2005		-0 6%		-0 5%		0.9%		6 4%		4 3%		1.8%	
2006-2015		-0 5%		-0.1%		-0 1%		-1.0%		2 1%		1.3%	
2016-2025		-0 4%		-0.2%		-0.8%		-1.7%		0 8%		1.5%	

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Table D - 10

Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Sleepy Eye (Brown County)

													l	
Mid-range					Nonf		Manufac		Gross D		Personal	Income	Personal Inc	com
Economic Case	Populatio		Househol		Employme	ent (Ths.)	Employme	ent (Ths.)	Product (\$	M; \$1996)	(\$M; \$	1996)	Household	(\$1
,	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chq	Value	% Chg	Value	<u>%</u>
1992	27 1	-	104	-	126	-	3 71	_	571	-	554	-	53,104	
1993	27 2	0.5%	10 5	0.8%	129	2.6%	3.90	5 2%	659	-1 7%	514	-7 1%		
1994	27 2	-0.3%	10 5	0 0%	12 9	-0.2%	3.95	1 4%	669	1 5%	565	9 9%		
1995	27 1	-0 1%	10 5	0 2%	13 2	2 4%	3.93	-0 5%	694	3.7%	565	-0 1%	53,596	
1996	27.4	0.8%	10 7	1 1%	13.8	5 1%	4 12	4.8%	749	7 9%	613	8 5%	57,513	
1997	27.3	-0 3%	107	%a o	13.9	0 6%	4 12	0 1%	819	9.4%	596	-27%	55,979	
1998	27.1	-0 6%	106	-0 4%	13.8	-0 8%	3,89	-5 7%	846	3 2%	620	3.9%	58,374	
1999	27.0	-0.2%	106	0 0%	138	0 1%	3 79	-2.5%	860	1.7%	617	-0.4%	58,116	
2000	26 9	-0.6%	10 6	-0 3%	14.1	2 0%	3 98	5 0%	893	3 9%	626	1 5%	59,194	
2001	26 9	0.3%	106	0,3%	14 0	-0 6%	3.82	-4.1%	888	-0.6%	629	0.4%	59,224	
2002	26.9	-0 2%	106	-0 1%	13 8	-1.5%	3 51	-8.2%		2 2%	630	0.2%	59,422	
2003	26 7	-0.6%	10 6	-0 5%	13 6	-1.5%	3.39	-3 3%	ł	3 7%	641	1 7%	60,762	
2004	26 7	-0 3%	10,5	-0 3%	14 4	5.9%	3.57	5 4%	1,027	9 1%	655	2.2%	62,259	
2005	26.5	-0.4%	10 5	-0 4%	14 5	0 8%	3.60	0 6%		2.2%	664	1 3%	63,304	
2005	26.5	-0 1%	10 5	0 2%	14.8	2.0%	3 65	1 6%		2.8%	675	18%	64,305	
2007	26.5	-0.1%	10 5	0 2%	14.9	0 9%	3 64	-0 2%	1	26%	683	11%	64,897	
2008	26.4	-0 2%	10 5	0 2%	15 0	0.3%	3 62	-0 8%		3 3%	693	1 5%	65,721	
2009	26.4	-0 2%	106	0 2%	15.0	0 4%	3 60	-0 4%		3 0%	701	1 2%	66,397	
2010	26 3	-0.2%	106	0 2%	15 0	0 0%	3 57	-0.9%		2 5%	711	1 4%	67,173	
2011	26.3	-0 2%	10.6	0 2%	15 0	0.1%	3.54	-0.9%	1,238	2 4%	720	1 2%	67,846	
2012	26 2	-0.2%	106	0.2%	15 1	0.2%	4 3.51	-0 9%		2.2%	729	1 3%	68,568	
2013	26 2	-0 2%	106	0.2%	15 1	0.1%	3 47	-1 0%	1,290	1 9%	.739	1.5%	69,424	
2014	26.1	-0.2%	107	0 2%	15.1	0 0%	3.44	-1 0%		1.8%	750	1 4%	70,289	
2015	26.1	-0.2%	10.7	0 2%	15.1	-0 1%	3 40	-1 1%	.,=	1 7%	760	1 4%	71,142	
2016	26.0	-0 2%	107	01%	15.0	-0 5%	3 36	-1.3%	1,357	1 6%	771	1 4%	72,036	
2017	26 0	-0 2%	107	0 1%	14,9	-0 6%	3 31	-1.4%	1	17%	781	1.3%	72,946	
2018	25,9	-0 2%	107	0.0%	14 8	-0.5%	3.26	-1 4%	1,399	14%	791	1 4%	73,907	
2019	25 9	-0 2%	107	0 1%	14 8	-0 5%	3 21	-1 5%	1,414	10%	802	1.4%	74,890	
2020	25 8	-0 1%	107	0.0%	14 7	-0.6%	3.16	-1 6%	1,427	10%	814	1 4%	75,924	
2021	25 8	-0 1%	10.7	0.0%	14 6	-0.6%	3 11	-1 7%	1,439	0.8%	825	1 4%	77,006	
2022	25 8	-0.1%	107	-0 1%	14.5	-0.8%	3 05	-1 7%		1 0%	B37	1 4%	78,159	
2023	25 7	-0.1%	107	-0.1%	14.4	-0 7%	, 3 00	-1 7%		1 0%	849	1 4%	79,377	
2024 2025	25 7	-0 1%	107	-0 1%	14 3	-0 7%	2 95	-1.8%	1,481	0 8%	862	1 4%	80,634	
	25 7	-0 1%	10 7	-0 2%	14 2	-0 7%	2 90	-1 8%	1,493	0 8%	874	1 4%	81,929	
Average Perce	ent Change													
1995-2005		-0 2%		0 0%		1.0%		-0 9%		4 2%		1 6%		
2006-2015		-0 2%		0 2%		0 2%		-0.8%		2 4%		1 3%		
2016-2025		-0 1%		0 0%		-0 6%		-16%		1 1%		1 4%		

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Table D - 11

Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Springfield (Brown County)

		· · · · · · · · · · · · · · · · · · ·			-				r				
Mid-range Economic Case	Populatio	, , , , , ,	Household	ds (Ths.)	Nonfa Employme		Manufac Employme		Gross Do Product (\$		Personal (\$M; \$		Personal Inco Household (
	Value	% Chg	<u>Value</u>	% Chg	Value	% Chq	<u>Value</u>	% Chg	<u>Value</u>	<u>% Chq</u>	<u>Value</u>	<u>% Chg</u>	<u>Value</u>
1992	27.1	-	10 4	-	12 6		3.71	-	671	-	554	_	53,104
1993	27.2	0 5%	10 5	0 8%	12 9	2 6%	3.90	5.2%	659	-1.7%	514	-7.1%	
1994	27 2	-0.3%	10 5	0 0%	12.9	-0.2%	3.95	1.4%	669	1 5%	565	9 9%	53,727
1995	27 1	-0.1%	10 5	0 2%	13 2	2 4%	3.93	-0.5%	694	3 7%	565	-0.1%	
1996	27 4	0 8%	10.7	11%	13 8	5 1%	4.12	4.8%	749	7.9%	613	8.5%	57,513
1997	27.3	-0 3%	10 7	0 0%	13.9	0 6%	4.12	0.1%	819	9.4%	596	-2.7%	
1998	27 1	-0.6%	10.6	-0.4%	13.8	-0 8%	3 89	-5.7%	846	3.2%	620	3.9%	58,374
1999	27 0	-0 2%	10 6	0.0%	13 8	0 1%	3 79	-2 5%	860	1.7%	617	-0.4%	58,116
2000	26 9	-0 6%	10 6	-0 3%	14 1	2.0%	3.98	5.0%	1	3.9%	626	1.5%	59,194
2001	26 9	0 3%	10 6	0 3%	14 0	-0.6%	3 82	-4 1%		-0 6%	629	0 4%	59,224
2002	26 9	-0 2%	10 6	-0 1%	13 8	-1.5%	3,51	-8 2%	908	2.2%	630	0.2%	59,422
2003	26.7	-0.6%	10 6	-0 5%	13.6	-1.5%	3.39	-3 3%	942	3.7%	641	1.7%	60,762
2004	26 7	-0 3%	10.5	-0.3%	14.4	5.9%	3.57	5,4%	1,027	9.1%	655	2.2%	62,259
2005	26 5	-0 4%	10 5	-0 4%	14 5	0.8%	3 60	0 6%	1,049	2.2%	664	1.3%	63,304
2006	26.5	-0 1%	10 5	0.2%	14 8	2.0%	3 65	1.6%	,	2.8%	675	1.8%	64,305
2007	26 5	-0 1%	10 5	0.2%	14 9	0 9%	3.64	-0 2%	1,108	2.6%	683	1.1%	64,897
2008	26 4	-0 2%	10 5	0 2%	15 0	0 3%	3.62	-0 8%	.,	3.3%	693	1.5%	65,721
2009	26 4	-0 2%	10 6	0 2%	15 0	0 4%	3 60	-0 4%	.,	3.0%	701	1.2%	66,397
2010	26 3	-0 2%	10 6	0 2%	15 0	0 0%	3.57	-0 9%	1,209	2 5%	711	1 4%	67,173
2011	26 3	-0 2%	10 6	0 2%	15 0	0 1%	3.54	-0 9%	1,238	2.4%	720	1 2%	67,846
2012	26 2	-0.2%	10 6	0 2%	15 1	0.2%	3.51	-0.9%	1,266	2 2%	729	1 3%	68,568
2013	26.2	-0.2%	10 6	0 2%	15 1	0 1%	3.47	-1.0%	1,290	1 9%	739	1 5%	69,424
2014	26.1	-0.2%	10 7	0 2%	15 1	0 0%	3 44	-1 0%		1 8%	750	1 4%	70,289
2015	26.1	-0.2%	107	0 2%	15 1	-0 1%	3 40	-1 1%		1 7%	760	1 4%	71,142
2016	26.0	-0.2%	10 7	0.1%	15.0	-0.5%	3.36	-1.3%	1,357	1.6%	771	1 4%	72,036
2017	26.0	-0.2%	10 7	0 1%	14 9	-0 6%	3 31	-1.4%	1,380	17%	781	1 3%	72,946
2018	25.9	-0 2%	107	0 0%	14.8	-0 5%	3 26	-1.4%		1 4%	791	1 4%	73,907
2019	25.9	-0 2%	107	0 1%	14.8	-0 5%	3 21	-1.5%	1,414	1 0%	802	1 4%	74,890
2020	25.8	-0.1%	107	0.0%	14.7	-0 6%	3 16	-1.6%		1.0%	814	1 4%	75,924
2021	25.8	-0 1%	107	0 0%	14.6	-0 6%	3 11	-1 7%	1,439	0 8%	825	1 4%	77,006
2022	25 8	-0 1%	107	-0 1%	14 5	-0 8%	3 05	-1 7%	1,453	1 0%	837	1 4%	78,159
2023	25 7	-0 1%	10.7	-0 1%	14.4	-0 7%	3 00	-1.7%	1,468	1 0%	849	1 4%	79,377
2024	25 7	-0 1%	107	-0.1%	14.3	0 7%	2 95	-18%	1,481	0.8%	862	1 4%	80,634
2025	25.7	-0 1%	10.7	-0.2%	14 2	-0 7%	2 90	-1 8%	1,493	0.8%	874	1 4%	81,929
Average Perce	ent Change									ľ			ı
1995-2005		-0.2%		0.0%		1.0%		-0 9%		4 2%		1.6%	•
2006-2015		-0 2%		0 2%		0.2%		-0 8%		2.4%		1 3%	
2016-2025		-0 1%		0 0%		-0 6%		-16%		1.1%		1 4%	

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Table D - 12

Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Willmar (Kandiyohi County)

Mid-range Economic Case	Populatio	n (Ths.)	Househol	ds (Ths.)	Nonfi Employme		Manufac Employme		Gross D Product (\$		Personal (\$M; \$		Personal Inco
	Value	% Chg	<u>Value</u>	% Chg	Value	% Chg	Value	% Chg	Value	% Chg	Value	% Chg	<u>Value</u>
1992	39 7	_	148	-	17.7	_	270	-	901	-	773	_	52,307
1993	40 2	1.4%	15 1	1.8%	18.4	3 6%	2 94	9.0%	925	2.6%	748	-3 3%	
1994	40 7	1 1%	15,3	16%	186	1.1%	2 99	1 7%	969	4.8%	825	10 2%	53,906
1995	41.0	0 9%	15.5	1 4%	193	3 9%	3 22	7 7%	1,011	4 3%	840	19%	54,183
1996	41.4	0.9%	15 7	1.3%	20 2	4.8%	3 29	2 0%	1,087	7 6%	917	9 2%	58,374
1997	41 4	-0 1%	15.8	0 4%	20 5	1 2%	3 35	1.8%	1,185	9 0%	922	0 4%	
1998	41 3	-0.2%	158	0 3%	20 6	0 8%	3 36	0.3%	1,231	38%	982	6 5%	62,046
1999	41 3	0 1%	15 9	0 5%	20 5	-0 4%	3.33	-0 8%	1,229	-0 2%	999	18%	62,817
2000	41 2	-0 4%	15 9	0 1%	20 9	18%	3.14	-5 6%	1,256	2.2%	1,004	0.5%	63,050
2001	41 1	0 0%	15.9	0 0%	21 0	0 5%	3.06	-27%	1,254	-0.2%	1,003	-0 1%	62,980
2002	40.9	-0 7%	158	-0 6%	21.1	0 6%	2.98	-2 5%	1,307	4.2%	1,015	1 2%	64,164
2003	41 1	0.7%	15.9	0 8%	21.3	0.7%	3 07	2.8%	1,330	1.8%	1,022	0.7%	64,0B5
2004	41 2	0 1%	160	01%	22 6	6.0%	3 17	3,5%	1,407	5.8%	1,054	3 1%	65,986
2005	41.2	0 1%	16 0	0 1%	22 8	1 3%	3 21	1 2%	1,473	4 6%	1,080	2 5%	67,534
2006	41.4	0 4%	16 1	0 7%	23 4	2.5%	3 28	2 1%	1,515	2.9%	1,111	2 9%	69,031
2007	41.5	0 3%	16 2	0.7%	23 7	1 3%	3 28	0 1%	1,552	2 4%	1,136	2.2%	70,105
2008	41 6	0 3%	16 3	0.6%	23 9	0 7%	3 27	-0.5%	1,599	3 0%	1,162	2 3%	71,281
2009	41 7	0.2%	16 4	06%	24 1	0 8%	3 26	-0.1%	1,641	2 7%	1,184	1 9%	72,181
2010	41 8	0 2%	16 5	0 6%	24 2	0 3%	3 24	-0 6%	1,675	2 1%	1,205	1 8%	73,078
2011	41.8	0 1%	16 6	0.5%	24 3	0 4%	3.22	-0 7%	1,708	2 0%	1,226	1.8%	73,964
2012	41.9	0 1%	167	0.5%	24 4	0.5%	3 20	-0 7%	· 1,738	18%	1,249	18%	74,934
2013	41.9	0 1%	16 8	0 5%	24.5	0.4%	3 17	-0 9%	1,765	1.5%	1,273	1 9%	75,961
2014	41 9	0 1%	16 8	0 5%	24 5	0 3%	3.14	-0 8%	1,791	1 4%	1,300	2 1%	77,189
2015	42 0	0 1%	16 9	0 5%	24.6	0 1%	3 11	-0 9%	1,815	1 4%	1,326	2.0%	78,404
2016	42 0	0 1%	17 0	0 4%	24.5	-0.2%	3 08	-1.0%	1,838	1 3%	1,353	2.0%	79,650
2017	42 1	0.1%	17 1	0 4%	24 4	-0 3%	3 05	-1 1%	1,865	1 5%	1,379	2.0%	80,896
2018	42.2	0 2%	17 1	0.4%	24.4	-0 2%	3 01	-1 1%	1,888	1 2%	1,407	2.0%	82,179
2019	42.2	0 2%	17.2	0 4%	24.3	-0.2%	2 97	-1 3%	1,904	0 9%	1,435	2 0%	83,482
2020	42.3	0 2%	17 2	0.3%	24.3	-0.3%	2.93	-1.4%	1,920	0.8%	1,463	2.0%	84,850
2021	42 4	0.2%	17 3	0 3%	24.2	-0.3%	2 89	-1.5%	1,934	0 7%	1,493	2 0%	
2022	42.4	0 2%	17 3	0 2%	24 1	-0 5%	2.85	-1 5%	1,951	0 9%	1,523	2 0%	87,830
2023	42 5	0 1%		0 2%	24 0	-0 4%	2 80	1 5%	1,969	1 0%	1,554	2 0%	89,451
2024	42 6	0 1%		01%	23 9	-0 4%		-1 6%	1,985	0 8%	1,585	2 0%	
2025	42 6	0 1%	17 4	0.1%	23 8	-0.4%	2.71	-1 6%	2,001	0.8%	1,616	2 0%	92,875
Average Perc	ent Change	•											
1995-2005		0 0%		03%		17%		0.0%		3 8%		2 5%	
2006-2015		0 2%		0.6%		0 5%		-0 6%	· .	2 0%		2.0%	
2016-2025		0 2%		03%		-0 3%		-1 4%		0 9%		2.0%	

Table D - 13

Historical and Projected Economic Trends of the Big Stone II Member Counties
(Source: Economy.com)

City of Windom (Cottonwood County)

													,
Mid-range Economic Case	Populatio		Household		Nonfa Employme	ent (Ths.)		ent (Ths.)	Gross De Product (\$	M; \$1996)	Personal (\$M; \$	1996)	Personal Inco Household (S
	<u>Value</u>	% Chg	Value	% Chq	Value	% Chg	Value	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>
1992	126	-	50	-	4.8	-	0.75	-	227	-	237	-	47,211
1993	12 6	0 1%	50	0.3%	5.1	6.9%	1.01	35.4%	235	3 3%	202	-15 0%	40,000
1994	12 6	0.1%	51	0 2%	4.8	-5.1%	1.05	4.3%	235	0.3%	253	25.5%	50,076
1995	12.6	-0 3%	5.0	-0 2%	4.7	-3 1%	0.75	-28 5%	232	-1 4%	233	-8 0%	46,159
1996	12.5	-0 7%	5.0	-0.6%	4.7	1 4%	0,69	-8.5%	249	7.2%	264	13 4%	
1997	12.4	-1 0%	50	-0 8%	49	2.9%	0.75	9 5%	278	116%	262	-1 0%	52,567
1998	12.3	-0.5%	5.0	-0 4%	4 4	-9 5%	0 65	-14.3%	254	-8.7%	271	3.4%	54,606
1999	12.3	-0.3%	4.9	-0 2%	46	3 5%	0.80	23 2%	254	0 1%	257	-5.0%	51,955
2000	12 1	-0.9%	49	-0 8%	4.6	0 4%	0 71	-10.6%	260	2 4%	257	0.0%	52,390
2001	12 1	-0 7%	49	-0 6%	4.8	4 6%	0.93	30.6%	278	6.7%	250	-2 8%	51,229
2002	12 0	-0 4%	4 9	-0.3%	4.8	0.6%	0 86	-7 9%		4.6%	253	1.3%	52,036
2003	11.9	-0 5%	4 8	-0.4%	5 1	5.8%	1 37	59.3%	336	15.4%	266	5 2%	55,000
2004	12.0	0.0%	4.8	0.1%	5 1	0.2%	1 40	2.6%	339	0 9%	276	3 8%	57,042
2005	11.8	-1 0%	4 B	-0.9%	5 1	0 3%	1 40	0 2%	356	4 9%	278	0 6%	57,916
, 2006	11.8	-0.5%	48	-0 2%	5.2	1 6%	1 42	1 3%	364	2 3%	283	2.0%	
2007	11.7	-0 4%	48	-0 1%	5.3	0 6%	1 42	-0.4%	372	2 4%	286	0 9%	59,753
2008	11.7	-0 5%	48	-0 1%	5.3	0 0%	1.40	-1 1%	383	. 30%	289	0 9%	60,387
2009	11.6	-0 5%	48	-0 1%	53	0.1%	1 39	-0 7%	394	2.7%	291	0 7%	60,901
2010	11.6	-0 5%	4.8	-0 1%	5 2	-0.4%	1 38	-1 1%	402	2.2%	294	1 3%	61,774
2011	11 5	-0.5%	48	-0.1%	5.2	-0 2%	1.36	-1 1%	411	2 1%	298	1 3%	62,644
. 2012	11.4	-0 5%	48	-0.1%	5.2	-0 1%	1 35	-1.1%	419	2 0%	303	1.7%	63,731
2013	11.4	-0 5%	48	0 0%	5,2	-0 1%	1.33	-1 2%	426	1 7%	309	18%	64,921
2014	11.3	-0.5%	4.7	-0.1%	52	-0.3%	1 32	-1.2%	433	1 5%	313	1 5%	65,947
2015	113	-0 5%	4.7	-0 1%	5.2	-0.4%	1 30	-1.3%	439	1.4%	317	1.3%	66,906
2016	112	-0.4%	4.7	-0 1%	5.2	-0 7%	1 28	-1.5%	444	1 2%	322	1 4%	67,934
2017 2018	11 2 11.2	-0.4% -0 4%	47	0 1%	5.1	-0 8%	1 26	-1 5%	450	1 4%	326	1.4%	68,956
2018	11.2		47	-0 2%	5.1	-0.7%	1 24	-1 5%	455	1 1%	331	1.4%	70,047
2019	11.1	-0.4% -0.4%	4 7 4.7	-0 2% -0 2%	5.0	-0.7%	1.22	-1.6%	459	0.8%	336	1.5%	71,197
2020	11.1	-0.3%	4.7	-0 2% -0 2%	5.0	-0.8%	1.20	-1.7%	462	0.7%	341	1 5%	72,436
2021	11.0	-0.3%	47	-0 2% -0 3%	5.0 4.9	-0.9%	1 18	-1.8%	465	0.6%	346	1 6%	73,735
2022	11.0	-0.3% -0 3%	47	-0 3% -0 3%	4.9	-1 0% -0.9%	1 16	-1.9%	468	0 7%	352	1.6%	75,107
2023	10.9	-0 3%	47	-0 3%	49	-0.9% -0.8%	1.14 1.11	-1 8%	471	0.7%	357	1.6%	76,528
2024	109	-0 3%	4.6	-0.4%	48	-0.8% -0.9%	1.11	-1 8%	474	0.6%	363	1 5%	77,973
			4.0	-0.470	48	-0.9%	1 09	-1 9%	477	0.6%	368	1 6%	79,461
Average Perce	ent Change												
1995-2005		-0.6%		-0 5%		0 9%		6.4%		4 3%		1 8%	
2006-2015		-0.5%		-0.1%		-0 1%		-1 0%		2 1%		1 3%	
2016-2025		-0 4%		-0.2%		-0 8%		-1.7%		0.8%		1 5%	

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