

**MPUC Docket No. E-6472/GS-06-668**  
**OAH Docket No. 12-2500-17512-2**

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BEFORE THE  
MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS  
100 Washington Square, Suite 1700  
Minneapolis, Minnesota 55401-2138

FOR THE  
MINNESOTA PUBLIC UTILITIES COMMISSION  
127 7th Place East, Suite 350  
St. Paul, Minnesota 55101-2147

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In the Matter of a Joint LEPPG Site Permit,  
HVTL Route Permit and Pipeline (Partial Exemption)  
Route Permit Application for the Mesaba Energy Project

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**PREPARED DIRECT TESTIMONY AND EXHIBITS OF**  
**EXCELSIOR ENERGY INC., MEP-I LLC, AND MEP-II LLC**

**CLARENCE L. KADRMAS**

**JANUARY 16, 2007**

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1 **EXCELSIOR ENERGY, INC.**

2 **BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**

3 **PREPARED DIRECT TESTIMONY OF**

4 **CLARENCE L. KADRMAS**

5 **Q Please state your name, current employment position and business address.**

6 A Clarence L. Kadrmas. I am currently the Director of the Power Engineering  
7 Market Center at Short Elliott Hendrickson Inc. (“SEH”). My business address is Butler  
8 Square Building, Suite 710C, 100 North 6th Street, Minneapolis, Minnesota 55403.

9 **Q Would you please describe your educational and professional background.**

10 A I graduated with a Bachelor of Science degree in Electrical and Electronic  
11 Engineering from North Dakota State University in 1970. I have over 30 years of  
12 experience in the electric power industry and 15 years of experience in the natural gas  
13 industry. As part of that, I have extensive experience in project management, design and  
14 specifications, system startup and feasibility analysis. I have served as project manager  
15 for electrical and control design and operation of coal fired and gas turbine power plants.  
16 My resume is appended as Exhibit \_\_\_\_ (CLK-1).

17 **Q On whose behalf are you testifying?**

18 A I am testifying on behalf of MEP-I LLC, MEP-II LLC, and Excelsior Energy Inc.  
19 (collectively “Excelsior”), the developers of the Mesaba Energy Project (the “Project”).

1 Scope and Summary

2 **Q What is the purpose of your testimony in this proceeding?**

3 A The purpose of my testimony is to sponsor several sections of Excelsior's Joint  
4 Application and Environmental Supplement. The general subject of my testimony is the  
5 gas pipeline route that would serve the proposed West Range Site.

6 In particular, I am sponsoring the following sections:

7 **Joint Application**

8 Section 5 (Gas Pipeline Engineering and Operational Design)

9 **Environmental Supplement**

10 Section 1.12.2 (Natural Gas Pipeline)

11 I worked closely with Excelsior to select the route. I have reviewed these  
12 sections of the Joint Application and Environmental Supplement, which are based on my  
13 reports and analysis. I am available to answer questions related to these sections.

14 Conclusion

15 **Q Does this conclude your testimony?**

16 A Yes.

# EXHIBITS

# **EXHIBIT \_\_\_\_ (CLK-1)**

**Clarence L. Kadrmas, PE**  
Director/Power Market Center

**General Background**

Over twenty-eight years of experience in the management, governmental affairs, and operations of municipal electric utilities, and over thirty years in the electric industry. Extensive experience in the electric power industry, transmission planning, pool operations and engineering in a wide variety of electrical, power generation, substation, distribution, process control, and SCADA projects. This experience includes project management, project definition, planning, feasibility analysis, cost estimation, contingency planning, design and specifications, construction management, application program development, system startup, and training requirements. Types of projects include municipal water, municipal power generation, substations, distribution, natural gas systems, district heating, power supply and industrial manufacturing, services. Notable projects or achievements, the first GE LM6000 gas turbine package, the first hot water district heating system, the first PC based SCADA system, the first purchase of natural gas and oil reserves for a municipality.

**Experience**

**Generation facilities.** Project Manager for electrical and control design, and operation of coal fired, gas turbine and diesel plants. These projects included electrical, mechanical, instrumentation and control, and SCADA.

**Substations.** Project management, design, commissioning and startup of the electrical transmission and distribution substations. These projects included utility connection, building and processes, power distribution, instrumentation and control, and SCADA. Voltage levels to 345kv. Current projects completed include Rice Lake, WI 80mVA 69kV to 12.5kV distribution substation.

**Distribution.** Project management, operation and design of electrical, water, hot water district heating, wastewater, natural gas systems. These projects included operation, expansion, instrumentation and control, and SCADA. Long range expansion and replacement planning, GIS interface and placement.

**SCADA Systems.** Development, management, and start-up of SCADA systems for water, wastewater, electric, and natural gas. These systems were an integrated SCADA system for water, wastewater control, gas turbine sequencing, steam boiler control, and other SCADA system interfaces. Current projects include Shakopee, MN electric system: (26) feeders, (5) stations; Plymouth, MN water system: (16) wells, (26) lift stations, (5) towers, (2) filtration plants.

**Power Pools.** Involvement in the operation, decisions, and planning of the mid-North America area. Strongly familiar with the process and its members.

- MAPP Regional Transmission Committee: Elected and served as the Chairman of the RTC.

**Education**  
*Bachelor of Science  
Electrical and Electronic  
Engineering  
North Dakota State University  
(1970)*  
*Continually Present Papers at  
Technical Seminars*

**Professional Registrations**  
*Professional Engineer in  
Minnesota, Wisconsin,  
South Dakota, Colorado, Texas,  
California, North Dakota,  
Mississippi and New Mexico.*

**Professional Associations**  
*Minnesota Society of  
Professional Engineers  
Institute of Electrical and  
Electronic Engineers (IEEE)*

**Awards Received**  
*Bicentennial award from the  
Kingdom of Sweden for  
promoting district heating  
engineering and products to the  
US*  
*Award for service to MAPP as  
its Chairman*  
*Award for service to the  
Minnesota Municipal Utilities  
Association*  
*Award from Stewart and  
Stevenson and General Electric  
for the first LM6000 ordered*



- A member of the RTC subcommittee for transmission planning (TPSC), and served as its Chairman responsible for delivering the MAPP 10 year regional expansion plan.
- Elected as a member of the MAPP design review subcommittee, responsible to review and approve all MAPP transmission and generation additions.
- Served as a member of the Missouri Basin Systems Group operating committee, with WAPA as lead agency.
- Served as Chairman and member of the Sub-Regional planning group for Minnesota, Wisconsin, Manitoba area transmission.
- Served as the MAPP representative on the MISO expansion-planning group.
- Served on the rule making task force for the Minnesota Department of Commerce and the Public Utilities Commission on siting and reporting transmission lines and ownership for Minnesota utilities.

**Municipal Experience**, 25 years of involvement in the operation, decisions, and planning for municipal utilities. Familiar with public meetings, boards, billing, accounting, state requirements and rules, general municipal knowledge. Served as a manager for 17 years during this time.

