

# Dairyland Power Cooperative Job Description

**Title:** Control Systems Programmer/Analyst  
**Reports To:** Manager, Operations Control Systems  
**Supervises:** 0  
**Division:** Power Delivery  
**Department:** Operations Control Systems  
**Cost Center:** 128  
**Location:** Administration Building

HR USE	
<b>FLSA:</b>	Exempt
<b>Job No:</b>	RN0495
<b>Job Extent:</b>	0001
<b>EEO Class:</b>	02C
<b>Grade</b>	11

**PURPOSE:** Responsible for software development and maintenance for the Operations Computer Department computer systems. This includes assisting the Manager, Operations Computers, in recommending and coordinating software and hardware modifications and maintenance activities with support staff. Provide necessary support for the EMS and associated computers and networks to ensure safe, reliable, and economic management of the generation, transmission, and distribution resources of Dairyland Power and affiliated companies.

**ESSENTIAL JOB FUNCTIONS:**

1. Responsible for the day-to-day operation of the Energy Management System (EMS) and related subsystems. This system must be available 24 hours per day, every day, to enable control of DPC's power system. This responsibility extends to coordination of all software and hardware maintenance and/or modifications.

This responsibility includes, but is not limited to, the following:

- a) Responsible for maintaining and modifying real time applications and operating system level programs and procedures on the EMS and associated subsystems. Develop new programs and procedures as required. Analyze and display corrective/preventative actions as required.
  - b) Assist the Manager, Operations Computers, in the analysis, planning, and migration of the EMS and associated support subsystems.
  - c) Direct the activities of other DPC programmers or support staff that are assigned to assist in this effort.
  - d) Organize and update software libraries, listings, and associated documentation, software releases, backup tapes and discs, and all associated procedures and documentation.
  - e) Instruct dispatchers, System Operations staff, and support staff in the operation of new and modified programs.
2. Responsible for the operation of related Operations Computers support subsystems, including the System Operations Center (SOC) computer network, load management systems, MAPP communications network, and all Dairyland and affiliated company network facilities. This responsibility extends to coordination of software, hardware, and network facilities maintenance and development, organization of software libraries, listings, and associated documentation, backup tapes and discs, and all associated procedures and documentation.
  3. Make recommendations and assist in the design and specification of additions to the Operations Computers facilities, budgets, and long-range planning. Work with contractors on modifications and maintenance.

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4. Provide assistance to SOC, Electrical Maintenance, and Communications departments in the startup, operation, and troubleshooting of supervisory control equipment.
5. Work with the responsible DPC staff to ensure that the automatic generation control and data acquisition subsystems meet their requirements. Coordinates maintenance and modifications of these subsystems, with them to minimize impact on operations.
6. Train other DPC programmers and personnel in the operation of the system and the maintenance/modification of software for the system.
7. Maintain technical knowledge and competency necessary to serve as the technical expert for individually assigned systems (software, hardware, infrastructure, and business practices) for Dairyland Power and affiliated companies. Examples of the individually assigned systems include the EMS and SOC networks and security, ICCP data exchange, Network Applications, and GEN-SYS energy applications such as energy market pricing software, energy scheduling and billing software, data exchange, and networking facilities.
8. Maintain knowledge of affiliated companies such as GEN-SYS Energy, MAPP, and member cooperative systems sufficient to ensure consistent, efficient development and operation of jointly operated and maintained computer and telecommunications facilities.
9. Deploy and maintain automated summary and reporting systems for System Operations regulatory compliance requirements.
10. Represent Dairyland and/or affiliated external companies at meetings and industry functions as required.
11. Recommend training as necessary for the software staff.
12. Provide 24-hour support per the "On-Call Procedure" attachment.
13. Perform other duties as assigned.

**NATURE AND EXTENT OF FINANCIAL RESPONSIBILITY:** Responsible for recommending the purchase of tapes, supplies, and other computer-related items.

**MINIMUM QUALIFICATIONS:**

**Education & Experience:** B.S. Degree in Computer Science or related area preferred with a minimum of three years programming experience or related Associate Degree with five years experience.

**Skills:** Working knowledge of all phases of an electric utility system. Knowledge is required of emerging technologies and existing computer and telecommunications systems. Attend user schools to maintain knowledge of the software and operation of these systems.

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**Technical Skills:** Expertise required in a minimum of C, Java or Perl and familiarity with Unix and Windows NT.

Experience preferred in any of the following:

- Web application programming (CGI, HTML, JavaScript, Perl, C)
- Database skills(SQL, Oracle, PL/SQL, development or administration)
- Other programming languages (Visual Basic, LotusScript, FORTRAN)
- System administration (Unix, NT, MacOS, user and server systems)
- Network administration (TCP/IP, routers, security)
- Utility Operations (SCADA/AGC, Network Applications, Scheduling Applications)

**Licenses and Certifications:** Ability to obtain and maintain valid driver's license

**Physical Demands:** Sitting, standing, walking, kneeling, crouching/stooping/squatting, lifting, pushing, pulling, and twisting of upper body, bending, and reaching/stretching.

**Environmental Demands:** Works indoor with limited supervision.

**Other Job Characteristics:** Subject to call 24-hours per day, seven (7) days per week, to maintain total computer availability. In addition, the employee shall cooperate with other qualified staff to share the responsibility for being available to provide continuous software support for various computer systems. Ability to work under pressure, make decisions, set priorities, and meet deadlines.

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Prepared By: \_\_\_\_\_

Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

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