

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Illinois Power Company :
 :
Application of Illinois Power :
Company for a Certificate of Public : **03-0114**
Convenience and Necessity, :
pursuant to Section 8-406 of the :
Illinois Public Utilities Act, to :
construct, operate and maintain a :
new 138,000 volt electric line in :
Monroe County, Illinois. :

ORDER

By the Commission:

I. INTRODUCTION

On February 21, 2003, Illinois Power Company (“IP”) filed a verified petition with the Illinois Commerce Commission (“Commission”) seeking a certificate of public convenience and necessity, pursuant to Section 8-406 of the Public Utilities Act (“Act”), 220 ILCS 5/1-101 et seq., to construct, operate, and maintain a new 138 kilovolt (“kV”) electric line in Monroe County, Illinois.

Pursuant to due notice, hearings were held in this matter before a duly authorized Administrative Law Judge of the Commission at its offices in Springfield, Illinois on March 27 and May 6, 2003. Appearances were entered by counsel on behalf of IP and Commission Staff (“Staff”). A total of six witnesses presented testimony. Martin Hipple, the Manager of Electric and Gas Planning in IP’s Asset Performance and Compliance Management Department, William Badger, a Senior Engineer in the Electric Transmission Design Section of the Utility Operations Department, Cheryl Smith, a Real Estate/Claims Specialist in the Utility Operations-Real Estate and Claims Department, and Harry Chamblin, a Senior Environmental Professional in IP’s Environmental Programs group, testified on behalf of IP. James Spencer, a Senior Energy Engineer in the Electric Section of the Engineering Department of the Commission’s Energy Division, and Phil Hardas, a Financial Analyst with the Finance Department of the Commission’s Financial Analysis Division, testified on behalf of Staff. No petitions to intervene were received. The record was marked “Heard and Taken” on May 27, 2003. Neither IP nor Staff considered the filing of briefs necessary, since there are no contested issues in this proceeding.

II. BACKGROUND

IP is a public utility within the meaning of Section 3-105 of the Act and is an electric utility within the meaning of Section 16-102 of the Act. IP is engaged in the business of supplying electric power and energy throughout its certificated service territory in Illinois. The 138 kV line for which IP seeks permission to construct would be a three-phase, multi-grounded, electric distribution line approximately 3.2 miles in length. If approved, the new line will extend from Union Electric Company's ("UE") Line 1302 (located approximately one-half mile west of lower Valmeyer) to a new 138-34.5 kV substation to be located and constructed near upper Valmeyer, up and out of the Mississippi River flood plain. IP has obtained or has the option to obtain all necessary easements for the construction of the proposed line and does not request the right or power of eminent domain. IP states that it will own and operate the proposed line and that it will be entirely within its existing service territory. According to the petition, the proposed line will not be included in IP's proposed sale of its transmission system to Illinois Electric Transmission Company, LLC.

IP states that the proposed line and substation are necessary to continue to provide adequate, reliable, and efficient service to consumers in the region. Specifically, IP asserts that these facilities are needed to improve existing low voltage in the Waterloo area, which is subject to voltages below the planning criteria under normal conditions and significantly below the planning criteria under contingency conditions. IP reports that the new 138-34.5 kV substation will also provide improved voltages, capacity, and reliability of service in the Valmeyer area. The earliest estimated in-service date given the present status of the project and the construction lead time requirements is December 2003.

III. SECTION 8-406

IP seeks authority to build the new transmission line under Section 8-406 of the Act. Subsection (b) is the relevant portion of Section 8-406 and reads as:

No public utility shall begin the construction of any new plant, equipment, property or facility which is not in substitution of any existing plant, equipment, property or facility or any extension or alteration thereof or in addition thereto, unless and until it shall have obtained from the Commission a certificate that public convenience and necessity require such construction. Whenever after a hearing the Commission determines that any new construction or the transaction of any business by a public utility will promote the public convenience and is necessary thereto, it shall have the power to issue certificates of public convenience and necessity. The Commission shall determine that proposed construction will promote the public convenience and necessity only if the utility demonstrates: (1) that the proposed construction is necessary to provide adequate, reliable, and efficient service to its customers and is the least-cost means of satisfying the service needs of its customers; (2) that the

utility is capable of efficiently managing and supervising the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision thereof; and (3) that the utility is capable of financing the proposed construction without significant adverse financial consequences for the utility or its customers.

Whether IP has satisfied the criteria in Section 8-406 will be addressed below.

IV. PARTIES' POSITIONS

A. IP's Position

IP witness Hipple testifies with regard to how IP engineers its transmission, subtransmission, and distribution lines to ensure adequate voltage throughout the year. He states that IP's planning includes taking into account single contingency events. Planning for single contingencies recognizes that system disturbances and equipment failures are inevitable. Mr. Hipple states that the effects of these contingency conditions on the system must be evaluated and considered when determining the need for system reinforcement and the specific reinforcement plans. The goal, he continues, is to provide reliable electric service at a reasonable cost. Mr. Hipple testifies that contingency planning is commonly used throughout the electric utility industry, and single contingency planning has historically provided acceptable reliability at a reasonable cost.

Currently, the distribution substations in the Waterloo and Valmeyer area are fed from IP's 34.5 kV system. Mr. Hipple indicates that the 34.5 kV lines feeding the Waterloo and Valmeyer area are part of a 34.5 kV network serving the Dupo, Columbia, New Hanover, Waterloo, and Valmeyer area southwest of Belleville. He reports that there are two 138/34.5 kV transformers at the Dupo Ferry Road Substation which are the primary power sources to this area. He adds that there is another 138/34.5 kV transformer at the Centerville Substation which supplies the 34.5 kV network. Mr. Hipple states that the two transformers located at the Dupo Ferry Road Substation and the transformer located at the Centerville Substation are the three sources to the 34.5 kV network which are closest to the Waterloo and Valmeyer area. According to the Mr. Hipple, the distribution substations serving the Waterloo area are fed by a radial 34.5 kV line, and these substations are roughly 18 miles from the Dupo Ferry Road Substation. Similarly, he testifies further that the distribution substations serving the Valmeyer area are also fed by a radial 34.5 kV line, with IP's Valmeyer distribution substation roughly 19 miles from the Dupo Ferry Road Substation.

Mr. Hipple indicates that the two 138/34.5 kV transformers at the Dupo Ferry Road Substation are the primary sources to the Waterloo and Valmeyer area because the Dupo Ferry Road Substation is the closest supply point to the 34.5 kV lines to the Waterloo and Valmeyer areas. The Waterloo and Valmeyer load area is at the far south end of the 34.5 kV network. The Centerville Substation is roughly 11 miles north of the Dupo Ferry Road Substation, and as a result, 11 miles further from the Waterloo and

Valmeyer area. One 34.5 kV line connects the Dupo Ferry Road Substation to the Centerville 138/34.5 kV Substation to the north which in turn connects into the larger Belleville area 34.5 kV network. In addition, Mr. Hipple notes that the majority of the load served by the Dupo Ferry Road Substation is south of the Dupo Ferry Road Substation. As a result of the relative locations of these source transformers, loads on the network, and the system impedance, Mr. Hipple states that the majority of the energy is supplied by the Dupo Ferry Road Substation. Even under contingency conditions, he adds, the Dupo Ferry Road Substation supplies the majority of the energy, and the ability of the transformer at Centerville and the Belleville network to provide additional support to the Waterloo and Valmeyer area is limited.

Mr. Hipple reports that a 1999 study of the area reveals that an overload of the Dupo Ferry Road Substation 138-34.5 kV Transformer No. 1 is expected during summer load periods with the loss of Dupo Ferry Road Substation Transformer No. 2. In addition, the area around New Hanover and Waterloo will be subject to voltages below planning criteria under normal and contingency conditions during summer peak loads. To remedy this situation, Mr. Hipple states that IP proposes to tap the existing UE 138 kV transmission line approximately 3.2 miles west of the town of upper Valmeyer and extend a new 138 kV line eastward to a proposed new 138/34.5 kV substation. One new 34.5 kV line would extend approximately 0.2 mile north and connect to existing 34.5 kV Line 3341A near the IP Valmeyer Rt. 156 Substation. A second 34.5 kV line would be extended approximately 6 miles eastward and connected to existing 34.5 kV Line 3338B near the IP Waterloo Substation. Both Lines 3341A and 3338B, he notes, are presently radial and are supplied from the Dupo Ferry Road 138/34.5 kV Substation. In the absence of these system reinforcements, IP fears that it may not be able to provide the capacity and voltage support needed to serve the existing load and future load growth. Therefore, IP deems the proposed 138 kV line necessary to provide adequate, reliable, and efficient service to its customers.

The UE 138 kV transmission line, Mr. Hipple asserts, will supply the new 138 kV line and proposed substation with power. This line, he adds, connects into the transmission system on the north end at the 345 kV and 138 kV Cahokia Substation near St. Louis and on the south end at the 138 kV Rivermines Substation in southeast Missouri. Other connected substations are the IP Dupo Ferry Road Substation and two UE substations, Buck Knob and Selma in Missouri. According to Mr. Hipple, UE has reviewed the proposed 138 kV tap and line and determined that no significant power flow changes are expected on its system. He states that the new interconnection will displace power now being delivered at the Dupo Ferry Road Substation to the new Valmeyer Substation, which is connected to the same UE 138 kV line.

With regard to the location of new Valmeyer substation, Mr. Hipple testifies that consideration was given to locating the new substation closer to the UE 138 kV line, but that this option was determined to be unacceptable for several reasons. Although the 138 kV line costs would have been less with the substation located closer to UE's 138 kV line, Mr. Hipple contends that these savings would have been offset by much higher construction costs for the substation and the cost of building multiple 34.5 kV lines along

the proposed route of the 138 kV line to the existing Valmeyer distribution substation and to continue on to Waterloo. The present substation site is at the top of the river bluff. The only other substation site options significantly closer to the UE 138 kV line, he explains, were located in the flood plain. Mr. Hipple maintains that construction of a substation in the flood plain, if approval could be obtained from the Corps of Engineers, would be very expensive due to the fill requirements to place the substation above the flood plain. He states further that there would be significant additional expense constructing an access road to the substation which is above the flood plain.

Another disadvantage, Mr. Hipple observes, to locating the substation closer to UE's 138 kV line is that the source to the 34.5 kV system would then be further from the projected load centers. He testifies that this would result in increased voltage drop, reduced load carrying capability, and advancement of the need for future system upgrades.

Mr. Hipple testifies that the total estimated direct cost of the 138 kV line is \$1.8 million, while the total estimated direct cost of the entire project is \$5.5 million.¹ He indicates that IP will internally finance the construction of the line. He adds that the funds for the project have been internally approved and are included as part of IP's five-year capital budget forecast.

In light of the estimated costs, Mr. Hipple contends that the proposed project is the least-cost alternative for reinforcing the system and providing the capacity needed to serve future load growth. Among the other alternatives considered was extending a new 138 kV line from the Baldwin 138 kV switchyard and constructing a new 138/34.5 kV substation near the Waterloo area. This alternative, however, was rejected because, according to Mr. Hipple, it costs approximately \$10,645,000. Other options entailing contracting for the use of the existing generating facilities owned by Waterloo Municipal and installing new generation near Waterloo were also evaluated. Mr. Hipple states that these options were not pursued because of a number of concerns. He asserts that ongoing operating and maintenance costs, long-term ownership costs, reliability, and the environmental impacts are some of the key issues associated with reliance on local generation to meet the electric supply needs of the area. As the load in the area grows, he points out that the required level of generation and hours of operation increase. Correspondingly, he observes, the ongoing operating and maintenance costs increase and additional generating capacity would be needed to provide reliable service. In addition to the cost and reliability considerations, Mr. Hipple expects that EPA emission limitations to limit the permissible hours of operation of the generators. He adds that consideration was also given to converting existing 34.5 kV lines to operate at 69 kV or 138 kV. These options, however, were not pursued because the costs were expected to exceed those for the other alternatives.

Upon choosing to construct a new 138 kV distribution line to resolve the voltage and reliability concerns in the area, IP witness Badger testifies that IP considered three

¹ The entire project includes the 138 kV line, 138 kV substation, 34.5 kV line, 69 kV line, and the Dupo Ferry Road Substation breaker and relaying.

routes for the line with various options for tying different sections of these routes together. He states that IP started its evaluation of the routes by looking at the potential tap points to UE's 138 kV line and probable substation locations being considered. On-site overviews of the area were made and input from local administrators was obtained. On-site physical inspections of possible routes were also made. Mr. Badger indicates that county tax map photographs were reviewed to assess the number of property owners on various routes. IP also obtained aerial photographs that enabled it to look at home locations, and other possible obstructions to construction more accurately when potential routes were analyzed in more detail. Mr. Badger reports that on March 13, 2002 IP held a public information session to explain the potential routes and gather additional feedback from interested parties. Prior to the session being held, he testifies that public notice of this event was made in the local newspapers and individual letters were mailed to utility companies in the area, local officials in the affected area, and property owners and tenants within 200 feet of a proposed route.

IP also notified the U. S. Army Corps of Engineers, Illinois Department of Natural Resources-Division of Water Resources, Illinois Environmental Protection Agency, Illinois Historic Preservation Agency, Illinois Department of Agriculture, and Illinois Nature Preserves Commission. IP witness Chamblin reports that the Corps of Engineers issued the necessary permit. He testifies further that IP worked with the Illinois Nature Preserves Commission to protect endangered plant species during the construction phase of the project and during any future routine maintenance of the right-of-way property. Mr. Chamblin states the remaining agencies either approved the project or did not object.

Mr. Badger states that IP's completed evaluation of the routes led it to choose the one that it did for several reasons. First, the Illinois Nature Preserves Commission recommends IP's proposed route through the bluffs area in light of its impact on the environment and because it follows an already existing utility corridor. Second, the Village of Valmeyer, which owns most of the corridor up the bluffs, also prefers the route IP selected. In addition, Mr. Badger reports that no party objected to this route at the public information session. He further notes that there are only two houses located within 500 feet of the proposed route and these houses would be over 200 feet from the proposed line. Lastly, Mr. Badger adds that IP intends to place its structures such that there will be minimum interference with cultivated land.

From a pure construction standpoint, Mr. Badger acknowledges that one of the other alternative routes is somewhat cheaper (by approximately \$115,000). He states, however, that in light of the opposition from a landowner and the Illinois Nature Preserves Commission to using the cheaper route, IP fears that potential legal and remediation expenses could drive the overall cost of the "cheaper" route above the cost of the route IP proposes in its petition.

B. Staff's Position

Staff witness Spencer testifies that he reviewed the petition, testimony of IP's witnesses, and responses to data requests as well as inspected the proposed route and the alternative routes. He states that he conducted his review and inspection with the first two criteria of Section 8-406(b) in mind: (1) that the proposed construction is necessary to provide adequate, reliable, and efficient service to its customers and is the least-cost means of satisfying the service needs of its customers and (2) that the utility is capable of efficiently managing and supervising the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision thereof. Mr. Spencer is of the opinion that this project is needed to relieve an overload of IP's Dupo Ferry Road Substation 138/34.5 kV Transformer No. 1 during a first contingency outage condition in summer load periods and to relieve low voltage conditions in the Waterloo area. He testifies further that the line route proposed by IP is, in his opinion, the best route and, considering all factors, is likely to be the least cost route. Mr. Spencer also believes that IP is capable of efficiently managing and supervising the line's construction and has taken sufficient steps to ensure the line's adequate and efficient construction and supervision. He notes that Mr. Badger indicates that IP will competitively bid this project to qualified contractors and that work by these contractors will be monitored by construction inspectors. With regard to his areas of review, Mr. Spencer recommends that the Commission grant IP the relief it seeks.

The third criteria in Section 8-406(b), that the utility is capable of financing the proposed construction without significant adverse financial consequences for the utility or its customers, is addressed by Staff witness Hardas. Based on his review of IP's petition and all supporting documents, including data request responses, Mr. Hardas believes that IP is capable of financing the proposed construction without significant adverse financial consequences for the utility or its customers. He notes that IP's 2002 Securities and Exchange Commission Form 10-K indicates that IP's total net utility plant on December 31, 2002 was \$1,961.3 million. Total utility operating revenues for the twelve months ended December 31, 2002 was \$1,518.3 million. Mr. Hardas reports that the total estimated cost (both direct and indirect costs) of the entire Monroe County project using the preferred route is approximately \$7.43 million, or 0.379% of net utility plant and 0.4896% of total utility operating revenues. Because the estimated cost of the proposed construction is quite small in comparison to IP's total utility plant and revenue for electric operations, Mr. Hardas considers it reasonable to conclude that IP is capable of financing the proposed construction without significant adverse financial consequences for itself or its customers.

V. COMMISSION CONCLUSION

The Commission has reviewed the entire record and is satisfied that IP has made the requisite demonstrations under Section 8-406(b). Affected landowners received notice of this proceeding in accordance with Commission rules and none have entered an appearance. IP's efforts leading up to the filing of its petition, and the petition itself

and supporting testimony, appear particularly thorough with regard to consideration of alternatives for accomplishing the desired end, costs concerning and impacts on the environment, and preferences of landowners and local governing bodies. The Commission is persuaded by IP that construction of the new 138 kV line will improve existing low voltage in the Waterloo area and, in conjunction with the new proposed substation, provide improved voltages, capacity, and reliability of service in the Valmeyer area. In light of the options available to accomplish this end, the Commission is also convinced that the proposed line in the proposed route is the least-cost means of satisfying customers' needs. That IP is capable of efficiently managing and supervising construction and financing construction without significant adverse financial consequences is not questioned by the Commission.

VI. FINDINGS AND ORDERING PARAGRAPHS

The Commission, having considered the entire record, is of the opinion and finds that:

- (1) IP is engaged in supplying electricity to the public in Illinois; as such, IP is a public utility within the meaning of Section 3-105 of the Act;
- (2) the Commission has jurisdiction over the parties hereto and subject matter herein;
- (3) the facts recited and conclusions reached in this Order are supported by the record and are hereby adopted as findings of fact and conclusions of law;
- (4) IP has made the requisite demonstrations under Section 8-406 of the Act; and
- (5) a certificate of public convenience and necessity should be granted to IP for the 138 kV electric line depicted in Exhibit A to the petition.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that a certificate of public convenience and necessity is hereby granted to Illinois Power Company, pursuant to Section 8-406 of the Public Utilities Act, for the construction, operation, and maintenance of approximately 3.2 miles of 138 kV electric line in Monroe County, Illinois as described in the record and Order herein; said certificate shall be as follows:

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

IT IS HEREBY CERTIFIED that public convenience and necessity require (1) the construction, operation, and maintenance of approximately 3.2 miles of 138 kV electric line in Monroe County, Illinois along the route depicted in

Exhibit A to the petition; and (2) the transaction of utility business in connection therewith.

IT IS FURTHER ORDERED that said certificate is granted on the condition that Illinois Power Company, where and when necessary, obtain permission from the landowners and public authorities to use the lands to be occupied by the facilities described herein, and that no authority has been granted authorizing Illinois Power Company to use eminent domain to acquire land rights.

IT IS FURTHER ORDERED that subject to the provisions of 10-113 of the Public Utilities Act and 83 Ill. Adm. Code 200.880, this Order is final; it is not subject to the Administrative Review Law.

By order of the Commission this 18th day of June, 2003.

(SIGNED) EDWARD C. HURLEY

Chairman