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BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

FIRSTENERGY CORP.  
OHIO EDISON COMPANY  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
THE TOLEDO EDISON COMPANY

CASE No. 99-1212-EL-ETP  
CASE No. 99-1213-EL-ATA  
CASE No. 99-1214-EL-AAM

DIRECT TESTIMONY  
OF  
J. BERTRAM SOLOMON

ON BEHALF OF

BUCKEYE POWER, INC.  
AND  
OHIO RURAL ELECTRIC COOPERATIVES, INC.

APRIL 24, 2000

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OHIO RURAL ELECTRIC COOPERATIVES, INC.

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1     **I.     INTRODUCTION**

2     **Q.     Please state your name and business address.**

3     A.     My name is J. Bertram Solomon. I am a consultant specializing in public utility  
4            economics. My business address is GDS Associates, Inc., Suite 720, 1850  
5            Parkway Place, Marietta, Georgia 30067.

6     **Q.     Please outline your background and relevant experience.**

7     A.     I received the degree of Master of Business Administration from Georgia State  
8            University in 1973. My area of concentration was Finance. I also received the  
9            degree of Bachelor of Science in Industrial Management from the Georgia

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1 Institute of Technology in 1972. A copy of my curriculum vitae is attached as  
2 Exhibit No. JBS-1.

3 My work experience began as a cooperative student at Georgia Tech,  
4 where I gained approximately two years experience as an assistant engineer in an  
5 industrial production setting. After graduation from Georgia Tech in 1972, I  
6 worked approximately one and one-half years as a program manager for a  
7 management consulting firm and for another one and one-half years as a project  
8 analyst for a resort development firm.

9 I began consulting regarding electric utility-related issues when I was  
10 employed by Southern Engineering Company in January 1975. For the next  
11 eleven years, I worked on assignments in both the retail and wholesale rate  
12 departments of Southern Engineering, primarily in the area of electric utility rates.  
13 In February 1986 I left Southern to co-found GDS Associates, Inc., a public utility  
14 engineering and consulting firm providing integrated resource planning services,  
15 generation support services, financial and statistical services, and regulatory  
16 services nationwide. I now serve as Vice President and Treasurer for GDS.

17 During my career, I have provided expert testimony before the public  
18 utility commissions of Arkansas, Florida, Georgia, Indiana, Kentucky, Maine,  
19 Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Rhode Island,  
20 Texas and Virginia, and before the Federal Energy Regulatory Commission  
21 ("FERC"). The areas of my expert testimony have included, among others: the  
22 effects of alternative accounting methods on expenses, income taxes, revenues,



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1 rate base and cost of capital and their proper treatment for ratemaking purposes;  
2 reasonableness and prudence of various utility investments and expenditures;  
3 proper methods of cost allocation; various financial issues such as capital  
4 structure; required rates of return for investor-owned utilities and required margin  
5 levels for electric cooperatives; proper methods of measuring working capital  
6 requirements; rate design; integrated resource planning; various regulatory policy  
7 issues and economic feasibility analyses. I have presented testimony in water,  
8 natural gas and electric cases. I also have prepared and filed comments before  
9 various commissions in generic and rulemaking proceedings, and I have testified  
10 before state and federal legislative bodies. In addition, I have participated in the  
11 preparation of retail and wholesale allocated cost of service studies, power cost  
12 projections, generating plant joint venture feasibility analyses, and have been  
13 responsible for competitive power supply solicitations, negotiations and related  
14 litigation efforts.

15 **Q. Do you have any experience specifically with the unbundling of rates, the**  
16 **development of transmission service terms and conditions and rates, and the**  
17 **evaluation of proposed ISOs, Transcos and RTOs?**

18 A. Yes. The majority of my ratemaking consulting assignments have been for rural  
19 electric cooperatives and municipal electric utilities in either developing their  
20 wholesale or retail rates or in evaluating and assisting in the negotiation or  
21 litigation of the rates for their bundled and unbundled wholesale power and

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1 transmission service purchases. Since the early 1990's, more and more of my  
2 work has involved the unbundling of rates, the development of proper terms and  
3 conditions of transmission service, the proper pricing for ancillary service rates,  
4 the quantification of "stranded costs," the development of competitive energy  
5 markets, the procurement of competitive power supplies, the development of  
6 independent transmission system operators ("ISOs"), companies that only own  
7 transmission facilities and provide only transmission service ("transco"), and  
8 regional transmission organizations ("RTOs"). Since the passage and  
9 implementation of the Energy Policy Act of 1992 ("EPAct"), I have assisted  
10 clients in the preparation of "good faith requests" for transmission service and  
11 Federal Power Act ("FPA") section 211 applications for transmission service  
12 pursuant to the EPAct and the Rules and Regulations of the FERC and in the  
13 negotiation and litigation of transmission rates, terms and conditions as a result of  
14 such requests and applications.

15 **Q. Have you had occasion to review the independent system operator and**  
16 **ISO/Transco proposals filed before the FERC by some of the electric utilities**  
17 **in Ohio and others?**

18 A. Yes. On behalf of the Blue Ridge Power Agency in Virginia, I reviewed the  
19 FERC filing of the Midwest ISO of which Cinergy is a co-sponsor. My  
20 involvement in that proceeding was limited to providing input to counsel for use

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1 in their preparation of pleadings before the FERC and limited participation in  
2 settlement conferences held at the FERC.

3 I had more extensive involvement in reviewing the development of the  
4 Alliance RTO proposed by AEP, FirstEnergy and others. On behalf of a coalition  
5 of rural electric cooperative and municipal utilities in several states, I actively  
6 participated in the steering committee meetings and several working group  
7 meetings that were open to participation by interested parties during the Alliance  
8 RTO development process. I also provided input to counsel for my clients in  
9 preparing pleadings filed before the FERC in connection with the Alliance RTO  
10 application, and I prepared an affidavit that was filed as part of one such pleading.

11 In addition, I have been participating in the Cincinnati RTO collaborative  
12 process initiated by the FERC in its Order No. 2000. That collaborative is to  
13 address RTO formation issues that will affect the Midwest region including Ohio.

14 **Q. What material have you reviewed in preparing this testimony?**

15 A. While my previous and continuing work in the electric utility industry provides  
16 background information relevant to evaluating the issues in this case, for purposes  
17 of preparing this testimony I have reviewed FirstEnergy's initial and supplemental  
18 filings as they relate to the transmission issues, the Amended Substitute Senate  
19 Bill No. 3 ("SB 3" or "the Act"), the Final Analysis of the Act by the Ohio  
20 Legislative Service Commission, the Commission's November 30, 1999 Finding  
21 and Order in Case No. 99-1141-EL-ORD, its January 4, 2000 Entry on Rehearing

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1 in that case, the Staff Report of Exceptions and Recommendations in this  
2 proceeding, and information provided by Buckeye regarding its transmission  
3 requirements, its current transmission service arrangements and the potential  
4 impact pancaked transmission rates in the State may have on Buckeye's costs  
5 after its existing transmission agreement expires.

6 **Q. On whose behalf are you appearing in this proceeding?**

7 A. I am appearing on behalf of Buckeye Power, Inc. ("Buckeye") and Ohio Rural  
8 Electric Cooperatives, Inc. ("OREC").

9 **II. PURPOSE AND SUMMARY**

10 **Q. What is the purpose of your testimony?**

11 A. I have been asked by Buckeye and OREC to review the filing of FirstEnergy  
12 Corp. ("FirstEnergy" or the "Company") on behalf of its operating subsidiaries  
13 particularly in the area of its compliance with the Ohio restructuring legislation  
14 and the implementing rules of the Public Utilities Commission of Ohio  
15 ("Commission") regarding the requirements for joining an independent  
16 transmission entity ("ITE"), or otherwise providing for the independent operation  
17 of transmission facilities and the minimization of pancaked transmission rates,  
18 and to present the results of my review. I will also describe how this proceeding  
19 may impact Buckeye and OREC and their member distribution cooperatives who  
20 may be competing for the provision of retail generation services in the State.

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1       **Q.     Please summarize your conclusions as a result of your review of the**  
2               **FirstEnergy filing.**

3       A.     I have concluded that FirstEnergy has not presented an adequate proposal that  
4               would meet the requirements of the Legislature or the rules of the Commission  
5               with respect to the minimization of pancaked transmission charges or the  
6               independent operation of its transmission facilities as of January 1, 2001. While  
7               FirstEnergy and others are working toward gaining FERC approval of the  
8               Alliance RTO, it still has a long way to go to get final approval. Even if the  
9               Alliance RTO is finally approved by the FERC, however, unless all Ohio utilities  
10              join and place their facilities under its control, the requirement of the Act and the  
11              Commission's rules for the minimization of pancaked rates within the State will  
12              not be met. The Company has not made a definitive proposal that would  
13              eliminate, through reciprocity or other means, the imposition of more than one  
14              access charge for the use of more than one utility's transmission facilities within  
15              the State and minimize other multiple charges like losses, administration and  
16              other ancillary charges that would effectively minimize pancaking of rates among  
17              the individual utilities while RTOs are being formed or among multiple RTOs  
18              after they are formed.

19                      In addition, FirstEnergy's proposal to create at least two, if not more  
20                      RTOs that would operate within the State offers a minimalist solution for  
21                      improving service reliability in the State. While the inclusion of FirstEnergy and  
22                      AEP in a FERC-approved RTO would allow the internalization of the interfaces

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1 between their systems and an incremental measure of improvement in the reliable  
2 operation of the systems in the State, the Company's proposal would still allow  
3 for external interfaces or "seams" between the Alliance RTO, the Midwest ISO,  
4 Monongahela and DP&L. That would leave a patchwork of systems operating  
5 within the State that would fall far short of the kind of reliability improvement  
6 that could be gained by having all the transmission facilities in the State  
7 controlled by a single organization. The Company's suggestion that it will  
8 attempt to "coordinate" with others to resolve the seams issues that would result  
9 from the operation of multiple RTOs and ITEs within the State has the hollow  
10 ring of a plan to continue the status quo under a different name. It has long been  
11 the job of the North American Electric Reliability Council ("NERC") and the  
12 regional reliability councils to effectuate "coordination" of planning and  
13 operations among electric utilities for reliability purposes. Thus, I am concerned  
14 that simply another level of "cooperating" entities, at best, would hold little  
15 promise for significant improvement in regional reliability and, at worst, would  
16 enable the minimization of the size and scope of RTOs and, thus, ultimately  
17 discourage rather than encourage the significant reliability improvements that may  
18 be achieved through the control of all the transmission facilities within a broad  
19 region (or a State in the case of Ohio) by a single entity. Surely the presentation  
20 of a sketchy "outline" of a "framework" for future "cooperation" as has been  
21 proffered by FirstEnergy does not inspire confidence that any significant  
22 improvement in reliability will be achieved.

1     **III. DESCRIPTION OF BUCKEYE AND OREC AND BUCKEYE'S**  
2     **TRANSMISSION REQUIREMENTS**

3     **Q. Please describe Buckeye.**

4     A. Buckeye is a member-owned electric generation and transmission cooperative  
5       ("G&T") supplying electric power and energy to the electric distribution  
6       cooperatives in Ohio. As a non-profit electric cooperative, Buckeye is owned by  
7       its 25 member distribution cooperatives who are, in turn, owned by their member-  
8       customers who are the ultimate consumers of the power and energy supplied by  
9       Buckeye. The member cooperatives serve over 312,000 homes, farms, businesses  
10      and industries in 77 of Ohio's 88 counties. Thus, Buckeye's owners are  
11      ultimately these 312,000+ electric consumers scattered throughout the State.

12    **Q. Please describe OREC.**

13    A. OREC is the statewide association that represents the interests of Buckeye and its  
14      25 distribution cooperative members.

15    **Q. How does Buckeye supply electricity to its 312,000+ constituents?**

16    A. Buckeye owns two coal-fired generating units with a capacity rating of 1,230  
17      megawatts at the Cardinal Station located on the Ohio River near Brilliant, Ohio.  
18      Buckeye's member cooperatives own local distribution systems which provide  
19      delivery service to their ultimate consumer-owners. However, neither Buckeye  
20      nor its members own the integrated transmission facilities that are required to

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1 transmit Buckeye's generation resources to the local distribution systems of its  
2 member cooperatives. Thus, Buckeye must rely on the transmission systems of  
3 several other utilities in Ohio to provide this transmission service.

4 **Q. Please describe the transmission service arrangement Buckeye has for the**  
5 **transmission services required to deliver its power and energy from its**  
6 **generating resources to its member distribution cooperatives.**

7 A. Buckeye's current generating resources are connected to the Ohio Power  
8 Company ("Ohio Power")/American Electric Power Company ("AEP")  
9 transmission system at 345 kV, while the distribution facilities of its member  
10 cooperatives are connected at over 300 points to the transmission facilities of  
11 Ohio Power as well as six other electric utilities in the State. The other utilities  
12 whose transmission systems must be used are Columbus Southern Power  
13 Company ("CS Power"), which is also an AEP subsidiary, Cincinnati Gas &  
14 Electric Company ("CG&E"), a Cinergy subsidiary, two subsidiaries of  
15 FirstEnergy, the Toledo Edison Company ("Toledo Edison") and Ohio Edison,  
16 the Dayton Power & Light Company ("DP&L"), and the Monongahela Power  
17 Company ("Monongahela"), which is a subsidiary of the Allegheny Power  
18 System ("APS"). Thus, Buckeye must use the transmission system of the one  
19 independent company and the systems of all four different holding companies that  
20 operate within the State.



1 Over 32 years ago, on January 1, 1968, Buckeye entered into a contract,  
2 designated the Power Delivery Agreement ("PDA"), incorporating its  
3 transmission over all of these systems under a single umbrella agreement that is  
4 effectively administered by Ohio Power/AEP, which acts as the billing, collection  
5 and revenue disbursement agent for the other utilities. I have attached the PDA as  
6 Exhibit No. JBS-2. The administration and pricing provisions of the PDA have  
7 made it more efficient for Buckeye to deal with its need to use the transmission  
8 facilities of seven different companies and have moderated what otherwise might  
9 have been burdensome and expensive pancaked transmission agreements and rates  
10 with each of the companies involved.

11 The PDA was designed to meet the statewide transmission requirements  
12 presented by Buckeye's circumstances. However, it provides a practical example  
13 of the ability of the utilities within the State to cooperate with each other to  
14 develop one-stop shopping for transmission service using the facilities of all the  
15 systems in the State. Furthermore, it was not just done yesterday. It has been in  
16 place and operating effectively for over 32 years. Some of the other key features  
17 of the PDA are that it provides Buckeye the equivalent of statewide network  
18 service; it charges Buckeye a single rate; and it provides for the collection of  
19 revenues by a single entity and an allocation and disbursement of those revenues  
20 among all the utilities whose facilities are used to provide service.

21 I am not suggesting that the transmission service issues facing the State in  
22 preparing to implement retail power supply competition can be solved as simply

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1 as extending the PDA to all customers in the State. However, it does demonstrate  
2 that it is not unreasonable to expect the utilities in the State to be able to develop  
3 and timely implement joint agreements that will at least meet the minimization of  
4 rate pancaking requirements of the Act while permanent statewide RTO solutions  
5 make their way through the regulatory process.

6 **Q. Please define rate pancaking.**

7 A. Simply stated, rate pancaking means the “stacking” on of rates and/or charges for  
8 a particular service. The stacking of rates can take a multitude of forms.

9 To more fully explain rate pancaking, I will begin with the widely  
10 accepted understanding of network integration transmission service, which the  
11 FERC has required all utilities with interstate transmission facilities to implement  
12 for wholesale transactions through open access transmission tariffs. Network  
13 service allows transmission customers to integrate their loads and resources on a  
14 transmission system for a single transmission charge based on their load on the  
15 system. In order to facilitate the development of broader and more competitive  
16 generation markets, the FERC has extended the requirement that transmission  
17 service be provided over multiple transmission systems at a single, nonpancaked  
18 rate. It first applied the requirement to holding companies with more than one  
19 contiguous operating company. Next, through its Order No. 888, it extended the  
20 requirement to ISOs comprised of multiple unaffiliated systems. Finally, the  
21 FERC, in Order No. 2000, further broadened the application of the concept of

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1 providing transmission over multiple transmission systems for a single,  
2 nonpancaked transmission charge to RTOs.

3 The FERC's objective is to provide any given customer or load use of  
4 transmission facilities reaching as far as reasonably possible in order to maximize  
5 the number of generators that can supply that customer for essentially the same  
6 transmission cost that would be incurred by the generators that are connected  
7 directly to the same local transmission system as the customer's load. That policy  
8 helps to maximize the efficient use of generation in a region and maximize  
9 competitive conditions in the region. On the other hand, generation efficiency and  
10 competition is impeded when each owner of a transmission system that is used to  
11 deliver energy from a generator to a load is allowed to stack its transmission price  
12 onto the cost of the transaction.

13 As an example, take a customer whose load is on the DP&L system.  
14 DP&L could serve the load with its generators by incurring only a single  
15 transmission charge, say hypothetically \$1.60/kW for purposes of this example.  
16 However, if pancaked transmission rates are allowed, generators on the  
17 neighboring AEP system would incur two transmission charges to serve the  
18 customer - the \$1.60/kW of DP&L and the AEP system charge of, say \$1.40/kW  
19 for purposes of this example, or a total of \$3.00/kW. Because Monongahela is not  
20 directly connected to DP&L, but is connected to AEP, generators on its system  
21 would incur three transmission charges, or a total of, say \$4.50/kW - \$1.60 for  
22 DP&L, \$1.40 for AEP and \$1.50 for the Monongahela/APS system. Thus, it is

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1 easy to see how the pancaked charges really stack up and act as anti-competitive  
2 barriers to competition. In this example, generators on the DP&L system would  
3 have a decided advantage in competing for serving the customer load, and  
4 generators on the other systems would be decidedly disadvantaged. On the other  
5 hand, competition would be fostered if the rate pancaking were eliminated and the  
6 generators on all three systems could serve the customer for the same, or nearly  
7 the same, \$1.60/kW charge as that experienced by the DP&L generators. It is just  
8 such a level playing field for all load in Ohio that the Act requires and that the  
9 FERC is seeking to promote over the region.

10           Unfortunately, transmission rate pancaking is not the only form of  
11 pancaked charges that may occur. The sheer need to deal with the tariffs of two or  
12 three different companies to obtain and administer service effectively pancakes  
13 costs. Incurring the application of losses and ancillary services charges by two or  
14 three different companies can also effectively pancake costs. For example, if the  
15 individual loss factors in the tariffs of the three utilities in the example are 3%  
16 each, the customer could have to provide enough extra energy to supply 9% more  
17 than its requirements to take service from a generator on the Monongahela/APS  
18 system even though the actual losses may be only a fraction of that. This could be  
19 a very steep pancake since the cost of the energy might be five or six or more  
20 times the cost of the transmission access charge. Therefore, rate pancaking needs  
21 to be considered broadly and eliminated to the extent reasonably possible in all its  
22 forms.

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1       **Q.    What is Buckeye's interest in this proceeding?**

2       A.    It is critical to Buckeye, as a potential generation supply competitor and to its  
3           ultimate beneficiaries – the consumer-owners of its member distribution  
4           cooperatives – that pancaked transmission rates be eliminated within the State.  
5           Buckeye's PDA will expire in 2003.

6                   For many years, Buckeye's ultimate member-consumer-owners have  
7           borne the risks and costs of ownership of its Cardinal Station units. As a result,  
8           they own and get the use of a proven, reliable, and economical coal-fired  
9           generating resource, which they should continue to get the benefits of without  
10          having to incur higher pancaked transmission rate charges. Buckeye has  
11          attempted to estimate the result of having to take service under each of the open  
12          access transmission tariffs of each of the utilities to which its distribution  
13          cooperative loads are connected compared to the cost of taking service at a single  
14          blended rate for all the utilities in order to determine the approximate potential  
15          impact of pancaked rates within the State. While various aspects of this exercise  
16          are in a state of flux, Buckeye estimates that rate pancaking for service to its loads  
17          could cost approximately 40% more than under a single non-pancaked rate.  
18          Based upon its load on each utility's transmission system, Buckeye calculated its  
19          load ratio share of the transmission revenue requirement of each system it would  
20          have to cross to deliver its Cardinal Station power to its members' delivery points.  
21          Fortunately, Buckeye would be subjected to no more than two pancaked  
22          transmission rate charges to get to any member delivery point since the Cardinal

1 Station is connected to the AEP system which, in turn, has interconnections with  
2 each of the systems on which Buckeye's loads are located. On this basis,  
3 Buckeye estimated that its transmission costs would be approximately \$36.5  
4 million if pancaking is allowed and \$21.6 million if it is not allowed.

5 Clearly, Buckeye would be at a distinct competitive disadvantage in  
6 competing to serve loads in the transmission areas of any Ohio utility other than  
7 the AEP companies since it would have to incur two transmission charges while  
8 the transmission owner would only incur one to serve those loads in its area. This  
9 anticompetitive impact of pancaked transmission rates must not be allowed if  
10 there is to be a level playing field for competition in the State.

11 **IV. FIRSTENERGY'S FILING DOESN'T MEET TRANSMISSION RELATED**  
12 **REQUIREMENTS**

13 **Q. Has the Ohio Legislature recognized the critical role non-discriminatory**  
14 **open access to transmission facilities at non-pancaked rates will play in the**  
15 **development of competitive generation markets in the State?**

16 **A.** Yes. The first step towards the development of competitive generation markets in  
17 the State has to be the elimination of the transmission market power of vertically  
18 integrated electric utilities in the State and the elimination of multiple or pancaked  
19 transmission charges. The development of workably competitive markets requires  
20 a large number of buyers and sellers of a relatively homogeneous product where  
21 the market participants compete on a level playing field. Competitive generation

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1 markets result in relatively thin margins to producers. Therefore, when a  
2 generation supplier can get its product to market with a single transmission charge  
3 while other competitors must incur two or more transmission charges to reach the  
4 same market, a distinct competitive advantage exists, economic alternative  
5 supplies are restricted, and the resulting generation markets are narrowed and  
6 competition is diminished.

7 In order to broaden the generation markets within the State of Ohio so as  
8 to facilitate the development of workably competitive markets and obtain the  
9 maximum advantages that might be offered by the restructuring of the electric  
10 utility industry, pancaked transmission rates must be eliminated. The Legislature  
11 recognized these requirements at Section 4928.12 of its restructuring legislation  
12 where it required that control of transmission facilities in the State be transferred  
13 to one or more qualifying independent transmission entities that meet nine  
14 different requirements. Among those requirements are that:

15 (1) The transmission entity implements, to the extent  
16 reasonably possible, policies and procedures designed to minimize  
17 pancaked transmission rates within Ohio.

18 (2) The transmission entity achieves the objectives of an open  
19 and competitive electric generation marketplace, elimination of  
20 barriers to market entry, and preclusion of control of bottleneck  
21 electric transmission facilities in the provision of retail electric  
22 service.

23 (3) The transmission entity is of sufficient scope or otherwise  
24 operates to substantially increase economical supply options for  
25 consumers.

1 (4) The governance structure or control of the transmission entity is  
2 independent of the users of the transmission facilities.

3 Ohio Revised Code Section 4928.12(B).

4 **Q. Has FirstEnergy met the requirements of the Legislature and the**  
5 **Commission for definitive action that would result in the minimization of**  
6 **pancaked transmission rates within the State by January 1, 2001?**

7 A. No.

8 **Q. Please explain.**

9 A. Commission Rule 4901:1-20-17 provides three alternative ways the State's  
10 electric utilities may meet the requirement for minimizing pancaking of rates  
11 within Ohio. First, all of them may be in one ITE that minimizes pancaked rates  
12 within the State. Second, they may provide appropriate reciprocity agreements  
13 among themselves that minimize pancaked rates within the State. Third, they may  
14 propose another means to effectuate the policy objectives set forth in section  
15 4928.12 of the Revised Code as those objectives relate to the movement of power  
16 within Ohio to retail customers with a minimum of pancaking of rates. The Rule  
17 also provides that, "[a]ll such mechanisms to minimize pancaking of rates within  
18 Ohio shall be in place by January 1, 2001, unless otherwise determined by the  
19 commission." See Rule 4901:1-20-17(B)(3).



1 FirstEnergy chose the third option, but it failed to meet the requirement for  
2 that option. That requirement is that, “[a]ll utilities electing paragraph (B)(3)(c) of  
3 this rule shall provide documentation in their transition filings so as to enable the  
4 commission to determine whether they have met their burden of proof to satisfy  
5 the statutory policy objectives as they relate to transmission.” *Id.*

6 There are several reasons why FirstEnergy’s filing fails to meet this  
7 requirement. First, the Company’s witness on the transmission issue, Mr. Thomas  
8 C. Burgess, relies solely on the Company’s expectation that its transmission  
9 facilities eventually will be placed under the control of or actually be sold to and  
10 owned by the proposed Alliance RTO. However, there may or may not ever be an  
11 Alliance RTO, and even if the Alliance RTO does come to fruition, FirstEnergy  
12 and its transmission facilities may or may not be a part of it. The FERC, by its  
13 Order on Proposed Disposition and Related Rate Filings, dated December 20,  
14 1999, 89 FERC ¶ 61,298 (1999) (“December 20 Order”), did conditionally  
15 approve the Alliance proposal (with the exception of the pricing provisions) under  
16 Order No. 888’s ISO principles, but not under the requirements of its RTO Final  
17 Rule, which was issued on the same day.

18 Many obstacles to final approval of the Alliance RTO and ultimate  
19 implementation still exist. There were several conditions imposed by the FERC  
20 which must be adequately addressed in the compliance filings of the Alliance  
21 companies. While the Alliance companies did make a partial compliance filing  
22 on February 18, 2000, they did not address all of the conditions imposed by the

1 FERC, they requested rehearing on certain issues, and several protests of the  
2 partial compliance filing were filed by intervenors claiming that the conditions  
3 that were addressed by the filing were not adequately or appropriately addressed.  
4 Among such concerns was whether the geographic scope and configuration of the  
5 proposed Alliance RTO meet the requirements of the RTO Final Rule. The FERC  
6 has not yet ruled on the adequacy of the changes made in that partial compliance  
7 filing nor has it ruled on their rehearing request. In addition, the Alliance  
8 companies have yet to make a filing addressing the requirement of the FERC to  
9 eliminate their pancaked rate structure and to fully explain and support other  
10 aspects of their proposed rates and fees. The Alliance companies also did not file  
11 the required transmission tariff with appropriate terms and conditions of service.

12 Before the FERC can even make a final ruling on the proposed Alliance  
13 RTO, the additional compliance filings must be made by the companies and the  
14 intervenors in the proceeding must be given an opportunity to file any protests  
15 detailing any shortcomings they find with the compliance filings. Then, when the  
16 FERC does make its rulings on rehearing and on the compliance filings, if it  
17 doesn't approve the compliance filings in their entirety, each Alliance company  
18 will be able to decide whether it can accept the end result or not. At that point,  
19 FirstEnergy may or may not decide to continue its participation in the Alliance. If  
20 the FERC does eventually approve a revised Alliance RTO proposal and  
21 FirstEnergy does decide at that point to continue its participation, that is not likely  
22 to happen before January 1, 2001 and it certainly will not be in time for the RTO

1 to begin operation by January 1, 2001. Therefore, this proposal alone could not  
2 meet the January 1, 2001 requirement.

3 **Q. In what other ways has FirstEnergy failed to meet the requirements of the**  
4 **Legislature and the Commission for definitive action that would result in the**  
5 **minimization of pancaked transmission rates within the State by January 1,**  
6 **2001?**

7 A. In addition to there still being significant uncertainty over whether the Alliance  
8 RTO will ever come into existence and whether FirstEnergy will be a participant  
9 at such time, the Alliance RTO alone would not meet the requirement that  
10 pancaked transmission rates within Ohio be minimized even if all that did occur  
11 by January 1, 2001. The proposed Alliance RTO does not include  
12 CG&E/Cinergy, which is already a MISO participant, and it does not include  
13 either DP&L or Monongahela/APS. Thus, without the reciprocity agreements  
14 that fall under the second alternative (4901:1-20-17(B)(3)(b)) for minimizing  
15 pancaked rates in the State, which FirstEnergy has not proposed, there would still  
16 be significant rate pancaking that reasonably could be minimized.

17 Finally, even assuming all the utilities in the State joined the Alliance  
18 RTO, FirstEnergy has not demonstrated that pancaked rates would be minimized  
19 to the extent reasonably possible. At page 17 of his filed direct testimony, Mr.  
20 Burgess claimed that the originally proposed Alliance RTO pricing approach  
21 "complies with FERC Order No. 888" and that it is "consistent with the recent

1 FERC [RTO] NOPR.” In its December 20 Order, however, the FERC found that  
2 the Alliance pricing proposal did constitute pancaked rates in contravention of its  
3 ISO Principle No. 3 in Order No. 888 and it “direct[ed] Applicants to eliminate  
4 the pancaked rates.” 89 FERC at p. 61,922 (1999). Later in that order, the  
5 Commission also concluded that Mr. Burgess and the Alliance’s proposed pricing  
6 violated the pricing principle articulated in its RTO Final Rule. The Commission  
7 said:

8 This aspect of the proposal violates one of the fundamental  
9 tenets of the Final Rule. Continuing pancaked rates of any  
10 type has significant impacts on the development of regional  
11 markets because it assigns a higher transmission cost on  
12 some users solely as a result of the existing transmission  
13 owner’s corporate boundaries. Those transactions that will  
14 enjoy a single charge are those involving generators and  
15 loads located within a single corporate boundary of each  
16 transmission owner and, thus, continue a preference for the  
17 transmission owners’ generation resources. Applicants’  
18 claim that their proposal is better than the status quo  
19 because users will pay two pancaked charges instead of five  
20 is misleading.

21 *Id.* at p. 61,929. While the FERC ordered the Alliance companies to eliminate the  
22 pancaked rate design in their compliance filing and Mr. Burgess says the Alliance  
23 companies plan to do so, that filing has not yet been made. Therefore, it cannot  
24 yet be known whether the Alliance’s next proposed rate design will meet the  
25 FERC’s requirements.

26 The rationale of the FERC in not allowing the pancaked charges of the  
27 Alliance and other ISOs and RTOs is equally applicable here. Pancaked rates

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1 have an anticompetitive effect and would adversely impact the development of  
2 competitive electric markets in Ohio. That is one reason the Legislature required  
3 the minimization of pancaked rates to the extent reasonably possible and it is why  
4 they must be eliminated beginning on January 1, 2001 as the retail markets begin  
5 their development. To allow the continuation of pancaked rates, even for some  
6 interim period, would handicap the early development of competitive markets at a  
7 critical time.

8 **Q. Do you agree with Mr. Burgess' contention, at pages 4 and 5 of his**  
9 **Supplemental Testimony, that a FERC approved RTO meets all of the**  
10 **requirements of R.C. 4928.12(B)?**

11 A No. While one might hope that the FERC would not approve an RTO for the  
12 Midwest region that did not meet all the requirements of R.C. 4928.12(B) it  
13 cannot be assured. It is possible that the FERC might approve an RTO that does  
14 not meet all of the requirements of R.C. 4928.12(B). The primary reason is that  
15 while the FERC does focus on regional scope, it does not necessarily focus on  
16 specific states within the region and its primary focus is not on state legislative or  
17 retail market requirements. The focus of the Ohio Legislature, however, is on the  
18 State and the requirements for the development of retail markets equally or more  
19 so than wholesale markets. The Commission said it best in its November 30,  
20 1999 Finding and Order in Case No. 99-1141-EL-ORD:

1 The Commission believes that the legislature included  
2 Section 4928.12, Revised Code, to assure that RTEs  
3 appropriate for Ohio are established. The nine qualifying  
4 specifications were established and the Commission is  
5 required to assure that the RTEs meet those specifications  
6 and the needs of the state of Ohio. We also note that the  
7 specifications found in Section 4928.12, Revised Code, are,  
8 as some commenters suggested, not much different than the  
9 RTE requirements the FERC has established. However, we  
10 believe that the statute was enacted to protect the public  
11 interest statewide and, so, the application of the  
12 requirements may differ from FERC's requirements.  
13 Further, the rules focus on qualifying an RTE that is  
14 appropriate for operating in Ohio and appropriate for the  
15 intent of SB3. FERC's approval may not consider the  
16 requirements of Section 4928.12, Revised Code, inasmuch  
17 as the FERC will examine this on a federal level, while this  
18 Commission has a statutory obligation to ensure these  
19 standards/criteria are applied on a state level.

20 *Id.* at 44. The Act requires that the qualifying transmission entity, among other  
21 things, minimize pancaked transmission rates within this State and improves  
22 service reliability within this State. The FERC's primary focus is within the RTO  
23 rather than within the State. While the FERC does require a level of coordination  
24 and cooperation between RTOs, its requirements in those areas are not well  
25 defined nor are its associated timing requirements for implementation of such  
26 interaction keyed to the facilitation of retail competition in accordance with the  
27 timing requirements of the Act.

28 Also, while the FERC is concerned with a scope and configuration that  
29 will facilitate competitive wholesale markets, the Act requires the ITE to be of  
30 sufficient scope or to otherwise operate to substantially increase economical  
31 supply options for consumers. *See* R.C. 4928.12(b)(6). Of course, the consumers

1 referenced in the Act are primarily retail consumers. The retail requirements in  
2 the State are substantially larger than the wholesale requirements. Thus, it would  
3 require the added availability of much larger quantities of economical supplies to  
4 substantially increase economical supply options for the retail requirements in the  
5 State compared to the wholesale requirements. Therefore, an RTO that is  
6 approved by the FERC based on a sufficient enhancement to competition in  
7 wholesale markets still may not meet the requirements of the Act.

8 **V. RECOMMENDED ACTION**

9 **Q. What action do you recommend that the Commission take to assure the**  
10 **required minimization of pancaked transmission rates?**

11 A. The best action would be to require all the utilities in the State to join a single  
12 independent transmission entity or independent regional transmission organization  
13 with a non-pancaked rate design. Even though each utility is required to turn over  
14 control of its transmission facilities to an ITE, requiring all of them to join the  
15 same ITE presents the best solution to the requirement to minimize pancaked  
16 transmission charges because it also eliminates other significant problems. If  
17 multiple ITEs are allowed to be formed in the State, they will create multiple  
18 roadblocks to the development of efficient and competitive generation markets  
19 that will be cumbersome, time consuming, costly and inefficient to solve. As is  
20 clearly evident by the lengthy and mammoth task of conceptualizing, negotiating,

1 documenting, gaining approval, and implementing the Midwest ISO and Alliance  
2 RTO, developing a regional ITE is a lengthy and difficult process. Trying to  
3 work the bugs out of two, three or potentially even more fledgling ITEs within the  
4 State, in addition to trying to develop the level of coordination and cooperation  
5 required to effectuate seemingly seamless generation markets that do not impose  
6 multiple access fees and duplicative losses and administrative burden on market  
7 participants, seems almost insurmountable in a relatively short period of time. It  
8 makes far more sense for both the short-run and long-run to require the utilities in  
9 the State to work through the issues required to form a single ITE for the State  
10 and greater Midwestern region than to allow each to go its own way.

11 **Q. Do you have any practical suggestions for a framework that could potentially**  
12 **bring the Midwest ISO ("MISO") and the Alliance RTO ("ARTO") together**  
13 **on a mutually negotiated basis rather than having the FERC or this**  
14 **Commission order one of the entities to join the other?**

15 A. Yes. While there are numerous differences between the MISO and the ARTO, the  
16 most critical differences separating the transmission-owning members of the two  
17 organizations appear to be, first, the transco versus ISO issue and, second, the rate  
18 design and companion revenue allocation issues.

19 The MISO is set up to be purely an ISO where transmission owners  
20 relinquish control of their facilities to the independent system operator that will  
21 not be an owner of facilities itself. On the other hand, the ARTO is structured so



1 that the independent system operator can also own transmission facilities of its  
2 own. In the rate area, the MISO companies have a FERC-approved non-  
3 pancaking zonal license plate transmission rate design planned to be in place  
4 during the six year transition period while the MISO organization considers other  
5 forms of non-pancaked rate designs for the long term. On the other hand, the  
6 ARTO companies proposed to charge pancaked transmission rates in their initial  
7 filing with the FERC, but that proposal was rejected. The FERC required the  
8 ARTO companies to submit compliance rates eliminating the proposed  
9 pancaking, but no such compliance filing has been made to date.

10 One would hope that the MISO and ARTO companies could make  
11 compromises in these critical areas. Concerns regarding the potential for  
12 discriminatory treatment of facilities owned by a transco functioning as the  
13 system operator relative to its treatment of those facilities under its control but not  
14 its ownership are legitimate concerns that might be held by the MISO companies.  
15 I would hope, however, that the MISO and ARTO companies could agree on anti-  
16 discrimination safeguard procedures and policies that would minimize such  
17 concerns, thereby allowing both groups to come together on this issue. At the  
18 same time, I would hope that, in exchange for such compromise on the part of the  
19 MISO companies, the ARTO companies would be able to accept the MISO's non-  
20 pancaked rate methodology and associated revenue allocation methods with  
21 perhaps minimal modifications, especially in light of the FERC's policy against  
22 pancaked RTO rates and its rejection of the first rate design proposal of the ARTO

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1 companies and in light of the pancaked rate minimization requirements of the  
2 Ohio legislation and of this Commission. Mutual compromise in these critical  
3 areas should go a long way toward facilitating the combination of the MISO and  
4 ARTO companies into one larger regional ITE that would be sufficient in size and  
5 scope to facilitate competitive generation markets in Ohio as well as the type of  
6 broad regional electricity markets envisioned by the FERC in its Order No. 2000.

7 **Q. What is the alternative to all the Ohio utilities joining a single ITE?**

8 A. The other logical solution would be to have reciprocity and coordination  
9 agreements in place that would simulate the results of a single RTO in the State as  
10 much as possible. Loads within the State are currently charged for transmission  
11 service (bundled or unbundled) based upon the costs of the transmission system in  
12 the area where they are located. Thus, reciprocity agreements that would continue  
13 to place a single transmission access charge on the customer based upon the  
14 location of its load, even though it may use the facilities of one or more other  
15 utilities in the State, should result in each utility continuing to collect its revenue  
16 requirements. In the event there are specifically identifiable new costs that are  
17 caused by such transactions that are not currently recovered in the existing  
18 transmission rates of the utilities, upon the presentation of proper proof, the  
19 utilities should be allowed to recover the additional costs. It is possible that  
20 additional losses could be incurred under such arrangements within the State;  
21 however, depending upon the ultimate movement of electricity, there could be

1 little or no additional net losses incurred. Therefore, it is not immediately obvious  
2 that average system losses should be charged by each system that may be crossed  
3 by a transaction. In fact, since all of the loads in question are currently served  
4 within the State, it would be expected that the charging of average system losses  
5 for each system crossed would greatly over-compensate for losses. Thus, there  
6 would need to be coordination among the utilities at various time intervals after  
7 retail wheeling occurs to determine how losses may have changed on each system  
8 and proper compensation methods fashioned.

9 The seams between ITEs within Ohio would not be the only seams issues  
10 created by multiple ITEs. There would be seams issues between the Ohio ITEs  
11 and neighboring non-Ohio systems. The impacts that all such seams issues will  
12 have on the competitiveness of generation markets in Ohio must be evaluated to  
13 ensure that such markets are workably competitive.

14 Since such reciprocity agreements covering the use of transmission  
15 facilities in the State must be filed with the FERC, unless waiver of the FERC  
16 notice requirement is obtained, the utilities would have to file them no later than  
17 two months prior to the initiation of retail competition in the State. The  
18 Commission, under this alternative, should require each utility to make such a  
19 filing with the FERC in a timely fashion in order that the legislated industry  
20 restructuring dates can be met.

1       **Q.    What other issues are created by the existence of multiple ITEs within the**  
2       **State?**

3       A.   In addition to the need for pricing reciprocity and the appropriate handling of  
4       losses, numerous other problems are created by having multiple ITEs within the  
5       State rather than a single ITE. Having multiple security coordinators responsible  
6       for different systems within the State makes it more difficult to achieve maximum  
7       reliability over the facilities within the State. Having multiple ITEs rather than a  
8       single ITE in the State promotes the continued balkanization of the transmission  
9       systems with continued individualized planning and continued interfaces between  
10      the systems as opposed to centralized planning for the State and the region,  
11      including internalizing the interfaces between existing systems. Available  
12      transmission capacity ("ATC") calculations would continue to be made on both  
13      sides of the existing interfaces with the potential for inconsistent calculations and  
14      availability postings. Coordination among multiple systems' schedulers would  
15      continue to be required rather than a single-system scheduler that could ultimately  
16      be developed under a single ITE structure. One stop shopping for transmission  
17      service over multiple systems within the State would be more difficult to  
18      accomplish with multiple ITEs within the State. Multiple ITEs would continue to  
19      allow, and maybe require, duplicative administrative systems and personnel.  
20      Issues regarding what new facilities should be constructed, who should construct  
21      the facilities, who should own the facilities and how compensation should be

1 structured would continue to be problematic to address with multiple ITEs in the  
2 State.

3 **Q. Please continue your description of problems created by having multiple**  
4 **ITEs within the State.**

5 A. Unless appropriately structured reciprocity agreements are in place, in addition to  
6 rate pancaking there can be hidden costs associated with the lack of the statewide  
7 network service that would be available under a single ITE. For example, an  
8 entity with multiple generation resources and multiple delivery points requiring  
9 the use of more than one transmission system would simply pay one network  
10 transmission service rate under a single ITE for the State. Network service is  
11 charged monthly based on the actual loads placed on the system. If there are  
12 multiple ITEs, network service under open access transmission tariffs is normally  
13 only available on the system where the load is located. To bring resources to the  
14 border of the system where the loads are located, would thus normally require the  
15 use of multiple point-to-point service reservations which are priced on a capacity  
16 reservation basis rather than the basis of actual customer loads. Point-to-point  
17 reservations must be made for the maximum amount of transmission service that  
18 will be required over each point-to-point path rather than the network user being  
19 able to pay once based upon its actual load placed on the system at all points  
20 combined. Thus, with multiple resources and multiple loads, point-to-point  
21 transmission service becomes a much more expensive way to receive service than

1 network transmission service. This would be an added form of pancaking of  
2 transmission charges. The requirement to combine network service over one  
3 system with point-to-point service over another system also adds administrative  
4 complexity and additional costs for administration.

5 In Buckeye's situation, the potential requirement of having to take a  
6 combination of network service and point-to-point service over various systems  
7 would be particularly burdensome and costly, as it would for any retail load  
8 aggregators that might end up with similar circumstances. For example, in order  
9 to get its generation to its member delivery points, Buckeye could possibly be  
10 subjected to the following combination of requirements:

11 To serve loads on the AEP system

- 12 • Network service on AEP

13 To serve loads on the FirstEnergy system

- 14 • Point-to-point service on AEP  
15 • Network service on FirstEnergy

16 It is unclear, at this time, how the Alliance RTO, if finally approved and activated,  
17 may affect the above requirements.

18 To serve loads on the CG&E/Cinergy system

- 19 • Point-to-point service on AEP  
20 • Network service on Cinergy/MISO

21 To serve loads on the DP&L system

- 22 • Point-to-point service on AEP  
23 • Network service on DP&L

24 To serve loads on the Monongahela/APS system

- 25 • Point-to-point service on AEP  
26 • Network service on APS

1 To simplify the pancaking impact analysis I discussed earlier in my testimony,  
2 Buckeye assumed it would just pay its load ratio share of the transmission revenue  
3 requirements on each of the systems where it has load as well as on the AEP  
4 system as though all its use of the AEP system were under network service. If,  
5 however, it has to take point-to-point service to move its generation over the AEP  
6 system to each other system where it has load, Buckeye's administrative burden  
7 and transmission costs would certainly increase even more than the 40% it  
8 estimated.

9 Again, the best solution would be for all utilities in the State to be in one  
10 ITE or RTO that would provide system-wide network service for a single non-  
11 pancaked rate. However, if that solution is not required, the utilities should be  
12 required to file reciprocity and coordination agreements with the FERC no later  
13 than November 1, 2000 that would provide the equivalent of statewide network  
14 service at a single load-based rate and coordinated losses and ancillary service  
15 charges to minimize those costs as well.

16 **VI. THE APRIL 17, 2000 STIPULATION AND RECOMMENDATION**

17 **Q. Have you reviewed the Stipulation and Recommendation ("the Stipulation")**  
18 **filed in this proceeding on April 17, 2000 by FirstEnergy and certain other**  
19 **parties?**

1 A. Yes.

2 **Q. Does the Stipulation provide a just and reasonable and not unduly**  
3 **discriminatory or preferential resolution of the transmission and market**  
4 **power issues in this proceeding that would satisfy the statutory requirements**  
5 **of the Act and the rules of the Commission?**

6 A. No, it does not.

7 **Q. Please explain why not.**

8 A. There are several reasons. First and foremost, the Stipulation still fails to provide  
9 a specific, concrete set of commitments and actions that would remove the  
10 transmission pricing and administrative barriers to a functioning, competitive  
11 market for electricity within the State of Ohio. It does not satisfy the requirement  
12 in the Act for the minimization of pancaked transmission rates within the State.  
13 The Legislature recognized that requirement as a critical, threshold ingredient for  
14 the development of competitive electricity markets in Ohio. All potential  
15 competitors in Ohio must have equal access to the transmission facilities in the  
16 State for a single, non-pancaked rate for the playing field to be level. If they do  
17 not, incumbent transmission-owning utilities will have a competitive advantage in  
18 their service areas that will stymie the development of competition. This will  
19 provide the incumbent utility with a market power advantage over potential  
20 competitors. The flow of electricity to any customer in the State of Ohio without



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1 incurring pancaked transmission charges is the ingredient that will ultimately  
2 make the competitive cake rise. Without it, competition within Ohio will fall flat.

3 Even the parties to the Stipulation gave lip service to this important fact.  
4 In the transmission section of the Stipulation, page 10, the parties agree that  
5 *"resolution of these [reciprocity and interface/seams] issues is critical to a fully*  
6 *functioning retail market ..."* But do they incorporate a concrete, specific  
7 proposal to resolve those issues? No. They propose to have the Commission  
8 approve their transition plan, including the right to collect billions of dollars in  
9 transition costs, now without the resolution of such threshold issues on the  
10 promise that they will develop and attempt to implement rate reciprocity and  
11 seams solutions at some indefinite future time. My recommendation is that  
12 FirstEnergy and the other companies in Ohio come forward now with specific,  
13 concrete reciprocity plans that can be evaluated in connection with their transition  
14 plans and, if found to be reasonable and nondiscriminatory, that can be timely  
15 filed with the FERC and effectuated at the January 1, 2001 start of retail  
16 competition in Ohio. After all, that is what the Act and the Commission's rules  
17 require.

18 The Stipulation makes clear that FirstEnergy and the other signatories  
19 believe the reciprocity and seams issues can be resolved, and Buckeye's Power  
20 Delivery Agreement is a concrete example that they can be. The real issue, then,  
21 is when that will be done. I believe putting off the resolution of those issues until  
22 some later time gets the cart before the horse and leaves out a major piece of the

1 transition puzzle. All the pieces of the restructuring puzzle should be evaluated  
2 together to make sure the blueprint is complete and workable and that it can be  
3 implemented as a whole rather than in piecemeal fashion. There is too much at  
4 stake to wait until later to develop and implement what all participants appear to  
5 agree is a critical cog in the competitive market machinery.

6 **Q. Why isn't the proposal for OE, CEI and TE to reimburse any supplier**  
7 **serving retail customers within their respective service areas for the cost of**  
8 **any associated transmission charges imposed by PJM and/or by the MISO, if**  
9 **the MISO is fully operating on a single tariff, on generation originating in the**  
10 **MISO or PJM sufficient to resolve the minimization of rate pancaking**  
11 **requirement?**

12 **A.** For one, the parties to the Stipulation recognize it is not sufficient. Thus, the  
13 Stipulation further commits FirstEnergy to addressing the rate and service  
14 reciprocity and interface/seams issues in the future. Also, this payment would not  
15 cover pancaking for transactions going out of or through the FirstEnergy system  
16 to loads in the other service areas in the State. It would not cover transactions  
17 where the generation originates outside the PJM or the MISO. Furthermore, it  
18 would only apply until FirstEnergy's transmission system is within a FERC  
19 approved and operating RTO. Therefore, it is short of the rate pancaking  
20 minimization requirement and it is unduly discriminatory and preferential.

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1 In a pro-competitive environment within the State, a new aggregator  
2 should be allowed to acquire generation at the Cinergy trading hub or elsewhere,  
3 and sell it to loads off the transmission system of any utility in the State without  
4 incurring pancaked transmission charges. The Stipulation would not allow that to  
5 happen. Even FirstEnergy's repayment scheme would still permit pancaked  
6 charges for getting through the DP&L, AEP and Monongahela systems. Also,  
7 FirstEnergy would still be imposing a pancaked charge to move electricity out of  
8 or through its system to serve Ohio loads in the service areas of other utilities.

9 **Q. In fairness, from a practical perspective, FirstEnergy cannot solve the**  
10 **reciprocity and seams issues within the State alone, can it?**

11 A. No. However, FirstEnergy could do a lot more than it has done to resolve those  
12 issues. All the utilities in the State of Ohio have long known the requirements of  
13 the Act and what is needed to facilitate the objectives of the Act. Therefore,  
14 having long ago concluded that they would propose more than one ISO for the  
15 State, they should have been attempting to reach agreement on reasonable rate  
16 reciprocity and seams terms that would meet the requirements of the Act. If they  
17 had made such attempts and could not reach agreement, they could each have  
18 filed the rate reciprocity and seams terms they thought were most appropriate and  
19 the Commission could then rule on the best approach or combination of  
20 approaches before it.

1                   At the very least, as I have proposed, each of the Ohio transmitting utilities  
2 individually could have volunteered, or the Commission could require them, to  
3 impose transmission charges only on loads located within their transmission  
4 system and not for transmission through or out of their system as long as the  
5 ultimate consumer of the electricity is within the State of Ohio. That way,  
6 transmission rate pancaking within the State would be minimized and the utilities  
7 in the State would continue to collect their revenue requirements since, for the  
8 most part, the revenue requirements for the facilities in the State of Ohio are now  
9 collected based on the loads in the State. While there might be some cost shifting  
10 or even revenue loss as a result, those issues could be resolved in a number of  
11 ways. One would be for the utilities to coordinate on a way to share the revenue,  
12 in a fair manner. Another would be to absorb any reduction in total transmission  
13 revenue as a reduction in the earned rate of return. Many utilities have  
14 experienced falling transmission unit costs and rates in recent years, so many of  
15 the Ohio utilities may be earning more than their cost of capital on their  
16 transmission business. Additionally, as competition increases and loads grow,  
17 transmission revenues will increase and provide higher rates of return. If none of  
18 those alternatives are determined to work and the utilities could demonstrate that  
19 unreasonable cost shifts or overall revenue shortfall in the State would result, they  
20 could file with the FERC and the Commission to change their rates.

21                   Finally, as was done for Buckeye over 30 years ago, the utilities in the  
22 State of Ohio could pool their transmission revenue requirements and develop a

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1 single statewide rate based on the loads within the State. They could then divide  
2 the revenue in accordance with their individual revenue requirements. Then all  
3 loads in the State of Ohio would be charged a single rate for transmission  
4 anywhere within the State and the utilities would be fully compensated. I believe  
5 the result would not violate the required rate caps, but, if it did, the utilities and  
6 the Commission could evaluate alternatives for dealing with that issue. Certainly  
7 the amounts that might be involved would pale in comparison to the transition  
8 costs the utilities are seeking to collect in their transition plan cases now before  
9 the Commission.

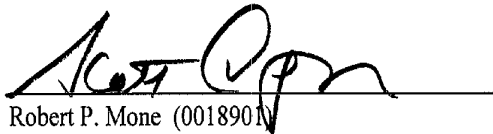
10 **Q. I have no further questions at this time.**

11 210476.1

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**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing, Direct Testimony of J. Bertram Solomon, has been served by e-mail and Fedex upon Arthur Korkosz at the address listed below, and by e-mail and regular U.S. mail upon the parties listed on the attached service list, on this 24th day of April, 2000.



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**EDUCATION:** Master of Business Administration - Finance, Georgia State University, 1973  
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**EXPERIENCE:**

Mr. Solomon has extensive experience in electric utility ratemaking and power supply contracting. This broad experience includes projected future power cost and power supply analysis; allocated cost-of-service and rate design analysis; revenue requirements and rate of return analysis; avoided cost analysis, presentation of expert testimony before the Federal Energy Regulatory Commission in wholesale rate cases and before state utility commissions in wholesale and retail rate cases, least cost integrated resource planning and certificate of convenience proceedings; negotiation of wholesale and retail full requirements, partial requirements, economic development, interruptible, and transmission rates and contracts; preparation and presentation of depreciation studies; analysis of management audits of electric utilities; preparation and evaluation of merger and acquisition analyses; participation in bankruptcy proceedings; and valuation of electric utility distribution systems.

Mr. Solomon was employed by Southern Engineering Company from January 1975 until February 1986. While at Southern Engineering, Mr. Solomon provided electric utility ratemaking services to rural electric cooperatives, municipally-owned utilities, large industrial firms, and governmental agencies advancing from rate analyst to Assistant Vice President, Economic and Regulatory Services. In February 1986, Mr. Solomon participated in the founding of GDS Associates, Inc. where he continues to provide regulatory consulting services, expert testimony on electric and gas utility pricing and service matters, and power supply contracting services.

Mr. Solomon has presented expert testimony before numerous regulatory bodies in the following areas: the cost of capital and required rate of return for both privately-owned and publicly-owned utilities; accounting as applied in ratemaking and the effects of appropriate alternative accounting methods on expenses, income taxes, revenues, rate base and cost of capital; proper methods of cost allocation; proper methods of measuring working capital requirements; the proper development of test year revenue requirements; rate design; and least cost integrated resource planning.

Mr. Solomon has testified extensively before the Federal Energy Regulatory Commission (formerly Federal Power Commission) in proceedings involving full and partial requirements wholesale rates and terms and conditions of service, mergers and acquisitions, market-based rate applications, regional restructuring and implementation of an independent system operator (ISO) and energy exchange, transmission rates and service terms, coordination service rates, service reliability, fuel adjustment provisions, customer filed complaints and special accounting dockets. Mr. Solomon has also testified before the Arkansas Public Service Commission, the Florida Public Service Commission, the Georgia Public Service Commission, the Public Service Commission of Indiana, the Kentucky Public Service Commission, the Maine Public Utilities Commission, the Michigan Public Service Commission, the Public Utilities Commission of Minnesota, the New Jersey Board of Public Utilities, the North Carolina Utilities Commission, the Pennsylvania Public Utility Commission, the Public Utilities Commission of the State of Rhode Island, the Public Utility Commission of Texas, and the Virginia State Corporation Commission in matters similar to those before the FERC plus the appropriate costing and design of interruptible, economic development and special contract rates and prudent integrated resource planning practices. In addition, Mr. Solomon has participated in the successful negotiation of settlements in many cases thereby eliminating the requirement for the filing of testimony.

In addition to filing expert testimony, Mr. Solomon has participated in the preparation of comments for submission to the FERC and state regulatory commissions in generic rulemaking proceedings on the following subjects: income tax normalization; changes to FERC Form 1; rate of return on common equity; CWIP in rate base; interest rate on refunds; treatment of captive fuel operations; cash working capital; changes in filing requirements; price squeeze; and pricing of electricity sales.

Additionally, Mr. Solomon has testified before the U.S. Senate Committee on Energy and Natural Resources, Subcommittee on Energy Regulation concerning the "Construction Work in Progress Policy Act of 1983" (S.817 and S.1069) and before the Utilities Committee of the Mississippi House of Representatives regarding valuation of electric distribution systems.

## POWER DELIVERY AGREEMENT

AGREEMENT dated as of January 1, 1968 among BUCKEYE POWER, INC., an Ohio corporation not for profit (herein called "Buckeye"), and THE CINCINNATI GAS & ELECTRIC COMPANY, COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY, THE DAYTON POWER AND LIGHT COMPANY, MONONGAHELA POWER COMPANY, OHIO POWER COMPANY, and THE TOLEDO EDISON COMPANY, each of which is an electric utility company operating in the State of Ohio (herein collectively called the "Companies" and sometimes individually referred to as "Company").

### WITNESSETH:

WHEREAS Buckeye and Ohio Power Company (herein called "Ohio") have entered into a Purchase Agreement dated as of January 1, 1968 contemplating the acquisition by Buckeye from Ohio of a 615,000 Kw generating unit at the Cardinal Station located near Brilliant, Ohio; and

WHEREAS Buckeye, Ohio and Cardinal Operating Company have entered into a Station Agreement dated as of January 1, 1968 to evidence and confirm, among other things, their respective rights and interests in and to the electric energy to be generated at the aforesaid Cardinal Station and their understandings with respect to the provision of additional generating capacity to assure the continuing availability of sources of electric power and energy for sale by Buckeye to the membership of Buckeye, which presently consists of twenty-seven cooperatively organized non-profit electric companies operating in said State; and

WHEREAS upon the terms and conditions herein provided, Ohio is willing to make available to Buckeye certain bulk transmission facilities owned or to be owned by it in the State of Ohio, and the Companies (including Ohio) are willing to make available to Buckeye certain additional facilities owned or to be owned by them in said State, for the purpose of delivering electric power and energy to Buckeye for sale by Buckeye to the Buckeye membership;

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, the parties hereto do hereby agree as follows:

## ARTICLE ONE.

## Definitions.

1.1 The following terms when used herein shall have the meanings specified:

*Annual Delivery Charge Rate per Kw* means a dollar amount per kilowatt used in determining the total monthly charge to Buckeye for the Delivery Service to be provided by the Companies hereunder.

*Annual Transmission Charge Rate per Kw* means a dollar amount per kilowatt used in determining the total monthly charge to Buckeye for the Transmission Service to be provided by Ohio hereunder.

*Buckeye Cardinal Hourly Demand* for any hour means the kilowatt demand at the Cardinal Station's high-voltage busses which is equal to the product obtained by multiplying (a) the sum of the Power Delivery Facilities Hourly Demand for such hour plus the Ohio Edison Transfer Points Hourly Demand for such hour, by (b) the applicable Transmission Loss Correction Factor (determined as provided in Section 5.1(b)) for such hour.

*Buckeye Cardinal Monthly Demand* for any month means the kilowatt demand at the Cardinal Station high-voltage busses which is equal to the maximum Buckeye Cardinal Hourly Demand for such month.

*Buckeye Cardinal Peak Demand* for any month means the maximum Buckeye Cardinal Monthly Demand established in any month prior to and including such month during the term hereof.

*Buckeye Member* means (a) any one of the twenty-seven electric companies organized and operated not for profit on a cooperative basis which are operating in the State of Ohio at the date of this Agreement and which together constitute the present membership of Buckeye, such Buckeye Members being listed in Appendix A hereto, (b) any electric company similarly organized and operated which may hereafter be or become a member of Buckeye, and (c) any successor to any existing Buckeye Member or Buckeye Members except (i) a successor which is at the date of

this Agreement a public utility included as such under the definition of that term contained in Section 4905.02 of the Revised Code of Ohio or which is a successor to any such public utility, or (ii) Buckeye or a successor to Buckeye, or (iii) a successor which is a political subdivision of the State of Ohio or a municipal corporation, bureau or department organized by or serving any such political subdivision or any other governmental agency or any successor to any of the foregoing.

*Buckeye Mortgage* means the Mortgage and Deed of Trust to be dated as of April 1, 1968 and to be made by Buckeye with The Ohio National Bank as Trustee in the form in which the same shall be executed and delivered by Buckeye on the date of the closing of the transactions provided for in the Purchase Agreement.

*Buckeye Power Requirement* means the aggregate requirements of Buckeye for electric power and energy from time to time for sale and delivery to the Buckeye Members and for resale and delivery by the Buckeye Members to customers in the State of Ohio for ultimate consumption within the State of Ohio or use by the Buckeye Members within said State in the operation of their respective facilities and systems; provided, however, that consistent with the desire and objective of all parties to minimize any unnecessary or uneconomic duplication of facilities, there shall not be included in the Buckeye Power Requirement any quantity of electric power and/or energy furnished to any consumer when the furnishing of power and/or energy to such consumer by a Buckeye Member is proscribed by the law of the State of Ohio reflected in Section 4905.26.1, Revised Code of Ohio, as said Section is in effect at the date of this Agreement. It is understood and agreed that the term "consumer" as used in said Section 4905.26.1 applies to any customer of a power and/or energy supplier whether served at wholesale or at retail.

*Buckeye System Monthly Demand* for any month means the maximum coincident Delivery Points Hourly Demand established for electric service at all Delivery Points during such month.

*Buckeye System Peak Demand* for any month means the maximum Buckeye System Monthly Demand established in any month prior to and including such month during the term hereof.

*Cardinal Station* means the steam electric generating station located near Brilliant, Ohio, as the same may from time to time be modified or expanded.

*Company's System Load and Loss Data* means an hour-to-hour report by each Company of its total system hourly load and of the associated Delivery Loss Correction Factor for such hour.

*Delivery Loss Correction Factor* applies to the Power Delivery Facilities of any Company and means with reference thereto that quantity for any hour, determined in accordance with the procedures specified in Article Five hereof, which, when multiplied by such Company's Delivery Points Hourly Demand for such hour, results in a product which is equal to the sum of (a) the Delivery Points Hourly Demand of such Company and (b) the kilowatt losses incurred in the Power Delivery Facilities of such Company during such hour in rendering the Delivery Service hereunder. Kilowatt losses for the Power Delivery Facilities of any Company shall be determined on the basis of the principle that such losses bear the same percentage relationship to such Company's Delivery Points Hourly Demand for any hour as the total kilowatt losses incurred in the Power Delivery Facilities of such Company bears to the total kilowatt load on such Power Delivery Facilities during such hour.

*Delivery Point* means (a) any point established pursuant to the provisions of Article Four hereof at which any portion of the Buckeye Power Requirement is delivered to Buckeye at facilities owned by Buckeye or any Buckeye Member from the Power Delivery Facilities of any Company, and (b) any Ohio Edison Delivery Point.

*Delivery Point Hourly Demand* for any hour means the clock-hour kilowatt demand established by Buckeye during such hour at a Delivery Point to the extent, but only to the extent, that such demand properly constitutes a portion of the Buckeye Power Requirement. Such demand shall be measured as of the Delivery Point with suitable metering equipment (as provided for in Article Ten hereof); provided, that in the event that any demand meter is installed at a location other than such Delivery Point, the demand so metered shall be adjusted to compensate for transformation losses and/or transmission losses, where applicable, and the adjusted value shall be used as the Delivery Point Hourly Demand. Delivery Point Hourly Demand is more specifically identified herein whenever



and wherever such identification is useful or necessary. Delivery Points Hourly Demand for any hour for any combination of Delivery Points shall be determined by adding for such hour the Delivery Point Hourly Demands for all such Delivery Points.

*Delivery Point Monthly Demand* for any month means the maximum Delivery Point Hourly Demand established at a Delivery Point in such month. Delivery Point Monthly Demand is more specifically identified herein whenever and wherever such identification is useful or necessary. Delivery Points Monthly Demand for any month for any combination of Delivery Points shall be determined by adding for each clock-hour of such month the Delivery Point Hourly Demands at all such Delivery Points and selecting the largest total so obtained.

*Delivery Point Monthly Energy* for any month means the sum of the kilowatthours constituting a portion of the Buckeye Power Requirement metered as of a Delivery Point during such month. Such kilowatthours shall be measured as of the Delivery Point with suitable metering equipment (as provided for in Article Ten hereof); provided, however, that if any meter is installed at a location other than such Delivery Point, the energy so metered shall be adjusted to compensate for transformation losses and/or transmission losses, where applicable, and the adjusted value shall be used as the Delivery Point Monthly Energy. Delivery Point Monthly Energy is more specifically identified herein whenever and wherever such identification is useful or necessary.

*Delivery Service* means the delivery of any portion of the Buckeye Power Requirement to Buckeye at any Delivery Point by means of the Power Delivery Facilities of any of the Companies or at the Ohio Edison Delivery Points as herein provided.

*Effective Date* means the date on which this Agreement shall become effective as provided in Section 12.1.

*Ohio's Bulk Transmission Facilities* means the 138 Kv and 345 Kv transmission facilities from time to time owned by Ohio, and such higher voltage transmission facilities as Ohio may install and own subsequent to the date hereof, which are or will be carried by Ohio in Accounts 350 through 359 of the Uniform System of Accounts, other than any of such facilities specifi-

cally provided or exclusively utilized to deliver a particular load commitment directly from a generating plant bus, and which are to be made available within the State of Ohio as herein provided to connect the Power Delivery Facilities of the several Companies and Ohio's Points of Interconnection with Ohio Edison electrically with the Cardinal Station or any other source of electric power and energy provided by Ohio or established by Buckeye and Ohio under or as contemplated by the Station Agreement. Principles analogous to those employed under the Uniform System of Accounts to determine whether transformation and related equipment is to be classified as transmission station or distribution station shall be employed to determine whether such equipment is to be classified as Ohio's Bulk Transmission Facilities or as Power Delivery Facilities of Ohio hereunder.

*Ohio Edison Delivery Point* means any point established pursuant to the provisions of subsection (d) of Section 4.3 hereof, and thereby constituting a Delivery Point hereunder, at which any portion of the Buckeye Power Requirement is delivered to Ohio by Ohio Edison Company and is delivered by Ohio to Buckeye at facilities owned by Buckeye or any Buckeye Member.

*Ohio Edison Transfer Points Hourly Demand* means that kilowatt demand for any hour which is equal to the product of (a) the Delivery Points Hourly Demand at the Ohio Edison Delivery Point for such hour, multiplied by (b) the applicable delivery loss correction factor established as specified in Section 5.1.

*Ohio Generating Stations* means Ohio's presently operating Tidd Station, Philo Station and Muskingum River Station. Future additions made to the major generating capacity of Ohio located within the State of Ohio will be included as Ohio Generating Stations as of the first day of the month following the month in which the date of commercial operation of such new generating capacity shall occur; provided, however, that new generating capacity installed by Ohio which is substantially different in design and operating characteristics from then existing steam generating capacity constituting Ohio Generating Stations or which shall have been installed by Ohio as a result of unusual circumstances shall not be included as Ohio Generating Stations for purposes of this Agreement except by mutual agreement between

Ohio and Buckeye. Generating capacity retired by Ohio or held in cold reserve and generating capacity determined by mutual agreement between Ohio and Buckeye, no longer to constitute part of the major generating capacity of Ohio within the State of Ohio shall be excluded as Ohio Generating Stations.

*Ohio's Points of Interconnection with Ohio Edison* means all points of interconnection from time to time established and existing within the State of Ohio between the facilities and systems of Ohio and Ohio Edison Company.

*Operating Committee* means a committee which shall consist of an authorized representative appointed by each of the Companies and an equal number of representatives appointed by Buckeye, all as provided in Article Seven hereof.

*Operating Company* means Cardinal Operating Company, an Ohio corporation organized by Ohio and Buckeye to operate the Cardinal Station as provided in the Station Agreement.

*Planning Committee* means a committee which shall consist of an authorized representative appointed by each of the Companies and an equal number of representatives appointed by Buckeye, all as provided in Article Seven hereof.

*Power Delivery Facilities* means, for each Company, (a) the transmission facilities within the State of Ohio carried by each Company in Accounts 350 through 359 of the Uniform System of Accounts, other than facilities which operate at less than 22 Kv and, in the case of Ohio, other than Ohio's Bulk Transmission Facilities, plus (b) any additional facilities of each Company within the State of Ohio used to connect electrically the aforesaid facilities carried in Accounts 350 through 359 with any Delivery Point or Delivery Points established within the State of Ohio hereunder, including facilities so used which operate at less than 22 Kv whether or not carried in said Accounts 350 through 359, and also including any connecting span of conductors over which electric power and energy is delivered from Ohio's Bulk Transmission Facilities to any such Delivery Point and any accessory equipment associated therewith.

Principles analogous to those employed under the Uniform System of Accounts to determine whether transmission and related equipment is to be classified as transmission station or distribution station shall be employed to determine whether such equipment is to be classified as Power Delivery Facilities of the character referred to in clause (a) above or as Power Delivery Facilities of the character referred to in clause (b) above.

*Power Delivery Facilities Hourly Demand* for any hour means the coincident clock-hour kilowatt demand which is obtained by adding for such hour the aggregate Transfer Points Hourly Demands of all the Companies.

*Purchase Agreement* means that certain agreement between Ohio and Buckeye dated as of January 1, 1968 providing for the sale by Ohio to Buckeye of a steam electric generating unit and related facilities at the Cardinal Station.

*Station Agreement* means that certain agreement among Ohio, Buckeye and Operating Company dated as of January 1, 1968 relating among other things to the ownership and operation of the Cardinal Station.

*Transfer Points Hourly Demand* means for any Company that kilowatt demand for any hour which is equal to the product of (a) the Delivery Points Hourly Demand of such Company for such hour multiplied by (b) such Company's applicable Delivery Loss Correction Factor (determined as provided in Section 5.1) for such hour; provided, however, that, in the case of Ohio, Transfer Points Hourly Demand means the kilowatt demand which is equal to the sum of (c) the product of (i) the Delivery Points Hourly Demand for such hour at Delivery Points of Ohio other than those at or adjacent to and connecting with Ohio's Bulk Transmission Facilities multiplied by (ii) Ohio's applicable Delivery Loss Correction Factor (determined as provided in Section 5.1) for such hour and (d) the Delivery Points Hourly Demand for such hour at Delivery Points of Ohio excluded under (i) above.

*Transmission Loss Correction Factor* applies to Ohio's Bulk Transmission Facilities and means with reference thereto that quantity for any hour, determined in accordance with the procedures specified in Article Five hereof, which, when multiplied by the Power Delivery Facilities Hourly Demand for such hour plus the Ohio Edison Transfer Points Hourly Demand for such hour, results in a product which is equal to the sum of

(a) the Power Delivery Facilities Hourly Demand, (b) the Ohio Edison Transfer Points Hourly Demand, and (c) the kilowatt losses incurred in Ohio's Bulk Transmission Facilities during such hour in rendering the Transmission Service hereunder. Any load commitment that Ohio delivers directly from any generating plant of Ohio over facilities (other than Ohio's Bulk Transmission Facilities) specifically provided for such delivery shall be excluded from the total load on Ohio's Bulk Transmission Facilities for the purpose of determining the Transmission Loss Correction Factor.

*Transmission Service* means the delivery of the Buckeye Power Requirement to the Power Delivery Facilities of the several Companies and to Ohio's Points of Interconnection with Ohio Edison by means of Ohio's Bulk Transmission Facilities as herein provided.

*Uniform System of Accounts* means the uniform system of accounts prescribed for Ohio by the Public Utilities Commission of the State of Ohio as in effect on the date of this Agreement.

*Wholesale Power Agreements* means the several wholesale power agreements between Buckeye and the Buckeye Members in effect on the date of the execution and delivery of this Agreement, said wholesale power agreements being evidenced by agreements dated as of September 15, 1966 and agreements supplemental thereto dated as of June 1, 1967 and dated as of January 1, 1968 in the form in which the same are attached hereto as Appendix B, and shall include any wholesale power agreement made in the future between Buckeye and a Buckeye Member in such form or, subject to the provisions of this Agreement with respect to the modification or amendment thereof, as the aforesaid agreements may hereafter be modified or amended.

## ARTICLE TWO.

### Termination of Existing Agreements.

2.1 At the date of execution and delivery of this Agreement, each of the Buckeye Members is purchasing its requirements of electric power and energy pursuant to one or more power purchase agreements with others. Pursuant to power purchase agreements made by the several Companies with certain Buckeye Members, the Companies are delivering the electric power and energy purchased from them thereunder to such Buckeye Members at the points designated as initial Delivery Points in Appendix D hereto. Pursuant

to power purchase agreements made by Ohio Edison Company with certain Buckeye Members, referred to in Appendix F hereto, Ohio Edison Company is delivering the electric power and energy purchased from it thereunder to such Buckeye Members at the points designated as existing Ohio Edison Delivery Points in said Appendix F.

2.2 Buckeye represents that it has entered into a Wholesale Power Agreement, with each of the Buckeye Members and that each such Wholesale Power Agreement is currently in full force and effect. Each Company hereby consents to the termination of each power purchase agreement between such Company and any Buckeye Member in effect on the Effective Date on and as of such date. Buckeye will cause each Buckeye Member so to terminate each power purchase agreement between such Buckeye Member and any Company in effect on the Effective Date to the end that, on such date, the Wholesale Power Agreements will constitute the effective contractual arrangements between Buckeye and each Buckeye Member for the delivery of the power and energy requirements of each Buckeye Member currently supplied by a Company. Buckeye will cause any Buckeye Member purchasing electric power and energy under an existing contract or contracts with a supplier other than a Company not to renew or extend any such existing contract or contracts or enter into any new contract unless Buckeye is unable to supply such Buckeye Member's electric power and energy requirements.

### ARTICLE THREE.

#### Transmission Service.

3.1 Ohio shall make Ohio's Bulk Transmission Facilities available as an extended generating station bus for use in delivering the Buckeye Power Requirement to the Power Delivery Facilities of the several Companies and to Ohio's Points of Interconnection with Ohio Edison to the extent provided herein or by the Station Agreement.

3.2 Subject to the terms and conditions of this Agreement, Ohio's Bulk Transmission Facilities to be made available hereunder shall be adequate at any and all times during the term hereof for the purpose of transmitting the Buckeye Power Requirement to the Power Delivery Facilities of the several Companies and to Ohio's Points of Interconnection with Ohio Edison. The Transmission Service rendered by Ohio hereunder shall have

the same levels of reliability and quality as the transmission of electric power made by Ohio for its own account to similar points of delivery from Ohio's Bulk Transmission Facilities.

3.3 Subject to the terms and conditions of this Agreement, Ohio shall in each hour during the term hereof accept into Ohio's Bulk Transmission Facilities that number of kilowatts of electric power which is to be delivered thereto for the account of Buckeye in such hour as provided in the Station Agreement and shall concurrently deliver from Ohio's Bulk Transmission Facilities (a) to the Power Delivery Facilities of each Company that number of kilowatts of electric power equal to the Transfer Points Hourly Demand of each Company for such hour, and (b) to Ohio's Points of Interconnection with Ohio Edison that number of kilowatts of electric power equal to the Ohio Edison Transfer Points Hourly Demand for such hour; provided, however, that Ohio shall not be required to deliver under this Section any quantity of electric power in excess of the quantity thereof delivered to it pursuant to the provisions of the Station Agreement, less losses on Ohio's Bulk Transmission Facilities determined as herein provided.

3.4 It shall be the responsibility of Ohio and/or the Companies to provide and maintain such facilities and metering equipment as may be required at points of interconnection between Ohio's Bulk Transmission Facilities and the Power Delivery Facilities of the respective Companies and it shall be the responsibility of Ohio to provide and maintain, or cause to be provided and maintained, such facilities and metering equipment as may be required at Ohio's Points of Interconnection with Ohio Edison.

3.5 Buckeye shall pay monthly to Ohio during the term hereof for the Transmission Service to be rendered by Ohio hereunder an amount in dollars equal to the sum of (a) the product of (i) one-twelfth (1/12) of the Annual Transmission Charge Rate per Kw and (ii) the Buckeye System Peak Demand applicable to such month, and (b) an amount in dollars sufficient to reimburse Ohio for any amounts paid or payable by it as sales, excise or similar taxes (other than taxes based on or measured by net income) in respect of the total amount paid by Buckeye pursuant to this Section and to enable Ohio, after provision for such taxes, to realize the net amount payable by Buckeye as provided in clause (a) above.

3.6 The Annual Transmission Charge Rate per Kw shall be four dollars and sixty cents (\$4.60) per Kw until adjusted as hereinafter provided, and shall be adjusted at the end of the sixth full calendar year following the

year in which all or any part of the Buckeye Power Requirement is first made available to Buckeye pursuant to this Agreement and annually thereafter in the manner specified in Appendix C hereto. Any adjustment so made shall become effective on the July 1 next following.

3.7 As soon as practicable after the end of each calendar month Ohio shall render a bill to Buckeye for the total amount owed for the Transmission Service provided during such month pursuant to this Article Three.

3.8 Bills rendered to Buckeye pursuant to this Article Three shall be paid by Buckeye within fifteen (15) days after the receipt thereof but bills shall be subject to such subsequent corrections as may be appropriate as a result of reviews or audits made for the purpose of verification or otherwise. Interest shall be paid by Buckeye at the rate of 6% per annum on any overdue amount.

3.9 (a) In the event that Buckeye shall acquire generating facilities at a location within the State of Ohio under the circumstances contemplated by subsection (c) of Section 2.3 of the Station Agreement, Ohio shall make available bulk transmission facilities adequate to enable electric power and energy generated at such generating facilities to be delivered to the Power Delivery Facilities of the several Companies and to Ohio's Points of Interconnection with Ohio Edison for ultimate delivery to Buckeye upon terms and conditions similar to those contained herein in respect of the Transmission Service to be provided hereunder.

(b) In the event that Buckeye shall require an additional source or sources of electric power and energy under the circumstances specified in Section 8.7 of the Station Agreement and shall enter into negotiations with Ohio with respect thereto as contemplated by subsection (a) of said Section 8.7, Ohio will negotiate with Buckeye concerning appropriate arrangements similar to the arrangements provided herein pursuant to which bulk transmission facilities of Ohio may be employed in effecting delivery of such power and energy.

(c) In the event that Buckeye shall require an additional source or sources of electric power and energy under the circumstances specified in Section 8.7 of the Station Agreement and shall enter into arrangements to obtain an additional source or sources for the generation of electric power and energy located within the State of Ohio, but otherwise than with Ohio as contemplated by subsection (b) of said Section 8.7, and if in the judgment of Ohio and Buckeye it is physically and economically feasible to operate such additional source or sources for the generation of electric power and



energy in parallel with the Cardinal Station and Ohio's Bulk Transmission Facilities, then Ohio and Buckeye will discuss and explore such proposed parallel operation and attempt to negotiate an agreement by which such parallel operation may be accomplished on terms mutually acceptable to Ohio and Buckeye.

#### ARTICLE FOUR.

##### Delivery Service.

4.1 Subject to the terms and conditions of this Agreement, each Company will make available or provide Power Delivery Facilities which, together with Power Delivery Facilities made available or provided by the other Companies and the Delivery Service provided by Ohio at the Delivery Points constituting Ohio Edison Delivery Points, will be adequate to deliver the Buckeye Power Requirement during the term hereof to the Delivery Points established hereunder within the State of Ohio for delivery and sale by Buckeye to the Buckeye Members as contemplated by this Agreement.

4.2 (a) Subject to the terms and conditions of this Agreement, each Company shall in each hour during the term hereof accept into its Power Delivery Facilities that number of kilowatts of electric power which is to be delivered thereto by Ohio as provided in Section 3.3, and shall concurrently deliver from its Power Delivery Facilities to Buckeye at each Delivery Point served by it hereunder that number of kilowatts of electric power equal to the Delivery Point Hourly Demand at such Delivery Point; provided, however, that, subject to the provisions of Section 13.7(b), no Company shall be required to deliver under this subsection (a) any quantity of electric power in excess of the quantity delivered to it pursuant to the provisions of Article Three of this Agreement, less losses on such Company's Power Delivery Facilities determined as herein provided.

(b) Subject to the terms and conditions of this Agreement, Ohio shall in each hour during the term hereof accept from the facilities of Ohio Edison Company at and shall concurrently deliver to Buckeye at each Delivery Point constituting an Ohio Edison Delivery Point that number of kilowatts of electric power equal to the Delivery Point Hourly Demand at such Delivery Point; provided, however, that Ohio shall not be required to deliver under this subsection (b) at any such Delivery Point any quantity of electric power in excess of the quantity delivered to it at such Delivery Point by Ohio Edison Company under arrangements made by Ohio with Ohio Edison Company for that purpose.

4.3 The Companies shall make available or provide, or cause to be made available or provided, adequate Delivery Service as and when required for delivery of the Buckeye Power Requirement to Delivery Points established as follows:

- (a) The initial Delivery Points listed in Appendix D hereto and designated on the map contained therein. The initial delivery voltage at each of the Delivery Points listed in said Appendix D shall be the delivery voltage specified therein for such Delivery Point.
- (b) Additional Delivery Points presently anticipated as listed in Appendix E hereto, the general locations of which are indicated on the map contained in the aforesaid Appendix D and the specific locations of which are to be established in each case when the additional Delivery Point is requested by Buckeye.
- (c) Such additional Delivery Points (i) as may be established by mutual agreement between Buckeye and the Company involved, or (ii) as may be designated by Buckeye at any location within the State of Ohio for the purpose of meeting the requirements of a Buckeye Member resulting from load growth and/or prospective load growth (within periods of up to five years in advance) in the affected area at any point of delivery where the Delivery Point Monthly Demand will be 750 kilowatts or more at the time such additional Delivery Point is established.
- (d) The Ohio Edison Delivery Points listed in Appendix F hereto and designated on the map contained therein and such additional Ohio Edison Delivery Points as may be established by mutual agreement between Ohio and Ohio Edison Company at the request of Buckeye.
- (e) Upon terms and conditions mutually agreed upon in each case by Buckeye and the Company or Companies concerned, including terms and conditions relating to compensation for any lines or equipment to be provided by such Company or Companies, such additional Delivery Points as may be reasonably required by Buckeye in order to provide two-way supply to a substation or substations owned by Buckeye and/or a Buckeye Member which can be switched to either source of supply for the purpose of improving its system operations and/or reliability of service.

Buckeye will use its best efforts to keep the Companies advised annually concerning anticipated loads at the Delivery Points established and in operation hereunder and, in order to facilitate planning and the coordinated devel-

opment of adequate Power Delivery Facilities, will also use its best efforts to keep the Companies advised concerning the need for additional Delivery Points for periods of ten years in advance. Whenever an additional Delivery Point shall have been requested by Buckeye and its entitlement thereto shall have been established, the Company concerned will establish such additional Delivery Point as promptly as may be practicable thereafter. The failure of Ohio to establish, by mutual agreement with Ohio Edison Company, an additional Ohio Edison Delivery Point pursuant to subsection (d) of this Section 4.3 shall in no way limit any right of Buckeye to designate an additional Delivery Point pursuant to clause (ii) of subsection (c) of this Section 4.3.

4.4 (a) Whenever a new Delivery Point is established as provided in subsections (b) and (c) of Section 4.3, the Company which can most advantageously provide Delivery Service at such new Delivery Point, taking into consideration the nature of existing facilities, the cost of constructing additional facilities and factors affecting the reliability of service, shall construct, own and maintain the Power Delivery Facilities requisite for that purpose, including the connecting span of conductors to the facilities of Buckeye or the Buckeye Member involved, and such Company shall locate, install, own and maintain the metering equipment which shall be required for such new Delivery Point. Buckeye shall, or shall cause the Buckeye Member which requires such new Delivery Point to, construct, own and maintain the necessary substation equipment, including such control switching and protective equipment as the established practice of the Company providing the Delivery Service to such new Delivery Point requires at similar locations on its system.

(b) Delivery Service shall be provided at any new Delivery Points established pursuant to subsections (b) and (c) of Section 4.3 at 69 Kv, except that such Delivery Service may be provided (i) if the available system voltage prevailing in the area is less than 69 Kv but equal to or more than 22 Kv and if the Company concerned shall so elect, at such prevailing available system voltage, or (ii) at such other voltage greater than 69 Kv or less than 22 Kv and under such terms and conditions relating thereto as may be determined by mutual agreement between Buckeye and the Company concerned. The parties hereto recognize that it may be necessary to provide Delivery Service at a new Delivery Point at a voltage higher than 69 Kv in order to carry out the responsibilities undertaken by the Companies hereunder. The parties also recognize, however, that despite intensive efforts during the negotiation of this Agreement, the parties have been unable to establish the conditions under which such service may be required or any objective rules and criteria pursuant to which service at such higher voltages may be made avail-

able by the Companies. Although the parties recognize that no current solution can be provided for this problem they will undertake, if a request shall be made for such Delivery Service in the future, to discuss and study any such request in good faith.

(c) Delivery Service shall be provided at any new Delivery Point constituting an additional Ohio Edison Delivery Point at 69 Kv or at such other voltage as may be established by mutual agreement between Ohio and Buckeye; provided, however, that, if the available system voltage prevailing in the area is not more than 34.5 Kv, then the Delivery Service at any such Delivery Point may be provided at 34.5 Kv if Ohio shall elect to deliver energy at such Delivery Point at such voltage.

(d) Any substation structures for a new substation required by Buckeye or a Buckeye Member which is to be supplied from a new Delivery Point established hereunder or from an existing Delivery Point shall be designed, constructed, insulated and equipped for operation at a delivery voltage of 69 Kv except as hereinafter provided in this subsection. In the case of a new substation supplied from a new Delivery Point served at a delivery voltage other than 69 Kv at the election of the Company concerned pursuant to clause (i) of subsection (b) of this Section, or at the election of Ohio to deliver energy at a new Delivery Point constituting an additional Ohio Edison Delivery Point at 34.5 Kv as contemplated by subsection (c) of this Section, and in the case of a new substation supplied from an existing Delivery Point being served at a delivery voltage less than 69 Kv but equal to or more than 22 Kv, Buckeye shall provide or cause such Buckeye Member to provide the substation accessories and control switching and protective equipment designed for operation at 69 Kv to the extent practicable so to do; provided, however, that Buckeye and/or such Buckeye Member may decide and elect at its option to provide such substation accessories, control switching and protective equipment designed for operation at a lower voltage than 69 Kv and in such event shall be responsible for the cost of any subsequent conversion of such equipment to 69 Kv. When a new Delivery Point is to be served at a delivery voltage other than 69 Kv determined by mutual agreement pursuant to clause (ii) of subsection (b) of this Section or by mutual agreement between Ohio and Buckeye as provided in subsection (c) of this Section, the requisite substation structures, substation accessories and control switching and protective equipment shall be designed, constructed and provided in accordance with such terms and conditions relating thereto as may be established by such mutual agreement.

(e) Buckeye may at its option construct, own and maintain or cause a Buckeye Member to construct, own and maintain a line extension from a point on Buckeye's or such Buckeye Member's then existing system or from a new load center to a new Delivery Point established in accordance with the provisions of Section 4.3 at a point on the Power Delivery Facilities of a Company or adjacent to Ohio's Bulk Transmission Facilities, to be determined by mutual agreement of the parties concerned, which will provide the shortest practicable line routing between such points, having due regard to the availability of rights of way and to physical obstacles such as streams, wooded areas, highways and the like. If Buckeye elects to construct or cause a Buckeye Member to construct any such line extension, the Company concerned will provide, own and maintain any terminal switching and protective equipment required by it and the connecting span of conductors to such new Delivery Point, and Buckeye or such Buckeye Member shall construct, own and maintain or cause to be maintained at its substation or substations supplied by such line extension the necessary control switching and protective equipment required in accordance with the established practice of the Company providing the Delivery Service.

4.5 (a) Whenever a new Delivery Point is established hereunder on the Power Delivery Facilities of any Company and the Company concerned elects to provide Delivery Service at such new Delivery Point at a delivery voltage other than 69 Kv pursuant to clause (i) of subsection (b) of Section 4.4, such Company shall advise Buckeye in writing of its plans, if any, to convert the operating voltage at such new Delivery Point to a higher voltage at some later date. In the event such Company shall advise Buckeye that it plans to convert the operating voltage at such new Delivery Point to 69 Kv within a period of five years following the date on which such new Delivery Point is energized, Buckeye shall obtain and install or cause the affected Buckeye Member to obtain and install at the expense of Buckeye or such Buckeye Member transformers suitable for dual-voltage operation at the immediately available operating voltage and at 69 Kv, and in such event the Company concerned shall pay to Buckeye an amount in dollars equal to the additional cost, if any, incurred by Buckeye or such Buckeye Member for any dual-voltage transformers so installed in excess of the cost of similar transformers designed for use only at a voltage of 69 Kv; provided, however, that if the Company concerned does not carry out its plan for such conversion within a period of five years after completion of such new installation such Company shall either, as it may elect, (i) pay

monthly to Buckeye, beginning with the first calendar month after the end of such five year period and continuing until such conversion shall have been effected, an amount in dollars equal to 0.5% of any net cost incurred by Buckeye or such Buckeye Member over and above the cost of transformers designed for use at the voltage initially made available by such Company, or (ii) pay to Buckeye an amount in dollars equal to any net cost incurred by Buckeye or such Buckeye Member over and above the cost of transformers designed for use at the operating voltage initially made available by such Company. The difference in cost, if any, between the cost of transformers installed for use at a voltage of 69 Kv in accordance with the provisions of this subsection and the cost of transformers designed for use at the voltage initially made available shall be determined to the satisfaction of the parties concerned at the time such transformers are installed and a record shall be made thereof.

(b) Whenever Buckeye or a Buckeye Member plans to replace any voltage transformation equipment and/or other related station facilities and/or to install any new or additional voltage transformation equipment and/or other related station facilities at any new or existing substation supplied from a then existing Delivery Point of any Company for which the existing operating voltage is 22 Kv or more but less than 69 Kv, it shall give written notice to that effect to the Company concerned. In the event that such Company plans to convert the operating voltage at such Delivery Point to 69 Kv within a period of five years after the scheduled completion of any such replacement and/or new installation, such Company shall, within thirty days following the receipt of such notice, advise Buckeye in writing to that effect, and Buckeye, or at its direction such Buckeye Member, shall provide and install at the expense of Buckeye or such Buckeye Member such replacement and/or new installation designed for dual-voltage operation at the immediately available voltage and at 69 Kv and in such event the Company concerned shall pay to Buckeye an amount in dollars equal to the additional cost, if any, incurred by Buckeye or such Buckeye Member for the dual-voltage facilities so installed in excess of the cost of similar equipment designed for use only at a voltage of 69 Kv; provided, however, that if the Company concerned does not carry out its plans for such conversion within a period of five years after completion of such replacement or new installation the Company concerned shall either, as it may elect, (i) pay monthly to Buckeye, beginning with the first calendar month after the end of such five year period and continuing until such conversion shall have been effected, an amount in dollars equal to

0.5% of any net cost incurred by Buckeye or such Buckeye Member over and above the cost of a similar replacement and/or new installation designed for use at the operating voltage available at the time such replacement and/or new installation is made, or (ii) pay to Buckeye an amount in dollars equal to any net cost incurred by Buckeye or such Buckeye Member over and above the cost of a similar replacement and/or new installation designed for use at the operating voltage available at the time such replacement and/or new installation is made. The difference in cost, if any, between the cost of such replacement and/or new installation made for use at a voltage of 69 Kv in accordance with the provisions of this subsection and the cost of a similar replacement and/or new installation designed for use at the lower operating voltage existing at the time such replacement and/or new installation is made shall be determined at such time to the satisfaction of the parties concerned and a record shall be made thereof.

(c) In the event that Buckeye shall no longer require Delivery Service pursuant to this Agreement at a Delivery Point established on the Power Delivery Facilities of any Company subsequent to January 1, 1965 for operation at a delivery voltage between 69 Kv and 22 Kv, inclusive, and Delivery Service at such Delivery Point shall be terminated within twelve and one-half years following the date on which such Delivery Point was placed in operation, then the Company theretofore providing Delivery Service at such Delivery Point shall be entitled to reimbursement by Buckeye as hereinafter in this subsection provided for any Power Delivery Facilities installed to extend its existing Power Delivery Facilities to such Delivery Point and abandoned or to be abandoned by reason of such termination; provided, however, that if any section of the Power Delivery Facilities so installed is being used by the Company concerned at the date of such termination for the purpose of serving any other load, such right of reimbursement shall apply only to that section of such Power Delivery Facilities then devoted exclusively to the provision of Delivery Service to such Delivery Point. If any Company elects to abandon any Power Delivery Facilities under the circumstances contemplated by this subsection and to claim reimbursement therefor, it shall notify Buckeye to that effect in writing and Buckeye shall then be required, as it may elect, either (i) to purchase such Power Delivery Facilities from such Company at a price equal to the original cost thereof less accumulated depreciation thereon at the rate of 2.75% per annum to the date of termination as aforesaid, or (ii) to reimburse such Company in an amount equal to the original cost of such Power Delivery Facilities, less accumulated

depreciation thereon at the rate of 2.75% per annum to the date of such termination, plus the cost of removal of such Power Delivery Facilities, less the estimated salvage value thereof. Buckeye shall not be obligated to reimburse any Company pursuant to this subsection with respect to any Power Delivery Facilities which have remained in service for the delivery of power and energy to a Delivery Point established subsequent to January 1, 1965 for a period of more than twelve and one-half years; and nothing contained in this subsection shall be construed to confer any rights upon Buckeye or any Buckeye Member to acquire Power Delivery Facilities installed to serve a Delivery Point at which Delivery Service may thereafter be terminated within such period unless the Company concerned shall then elect to abandon the same.

(d) The provisions of this Section shall not apply to any Delivery Point constituting an Ohio Edison Delivery Point except to the extent so provided by mutual agreement between Ohio and Ohio Edison Company or between Ohio and Buckeye relating specifically, in either such case, to a particular Ohio Edison Delivery Point.

4.6 (a) Whenever any Company plans to ~~raise~~ the operating voltage of its Power Delivery Facilities serving a then existing Delivery Point at which the existing supply voltage is 22 Kv or more but less than 69 Kv and Buckeye or a Buckeye Member owns transformers and/or other station facilities already installed which are adequate in all respects for operation from such Delivery Point at such existing supply voltage and are not suitable for conversion to the higher operating voltage, the Company concerned shall either:

- (i) Make arrangements at its expense which will enable Buckeye or such Buckeye Member to replace such lower-voltage transformers and/or other station facilities with suitable higher-voltage transformers and/or other station facilities of equivalent capacity and of comparable age and condition; or
- (ii) Compensate Buckeye for itself or on behalf of such Buckeye Member for that portion of the total expense chargeable to replacement of such lower-voltage transformers and/or other station facilities with suitable higher-voltage transformers and/or other station facilities of equivalent capacity and of comparable age and condition. Determination of the amount of such compensation shall include consideration of depreciation accrued in respect of the equipment so replaced.



Any equipment and material which is removed because of a conversion subject to the provisions of this Section will become the property of such Company, unless Buckeye or the Buckeye Member shall elect to retain such equipment and material for use elsewhere and Buckeye shall pay or otherwise credit to such Company an amount equal to the depreciated value thereof. In any instance where Buckeye or a Buckeye Member shall elect to install transformers and/or other station facilities of greater capacity than the transformers and/or other station facilities owned by Buckeye or the Buckeye Member which are removed because of a conversion made as provided in this Section, Buckeye or such Buckeye Member, as the case may be, shall bear all expense incurred in excess of an amount equal to the cost to the Company concerned under option (i) or (ii) above. The Companies shall not be responsible for any part of the cost of converting to higher voltage operation any lines which are owned by any Buckeye Member as of the date of this Agreement, or which may be constructed or otherwise acquired by Buckeye or any Buckeye Member subsequent to the date of this Agreement, except that Buckeye or any Buckeye Member which owns any line listed in Appendix G hereto shall be reimbursed by the Company concerned in the amount specified in said Appendix G if and at the time such line is converted to higher voltage operation, and the Company concerned shall provide, own and maintain any terminal switching and protective equipment required by it and the connecting span of conductors to the Delivery Point. Upon any line conversion for which reimbursement is to be made by a Company pursuant to the preceding sentence, the provisions of this Section applicable to the ownership by a Company of equipment and material removed because of such conversion shall apply only to cross arms, insulators and related hardware.

(b) Ohio will not consent or agree to any conversion of the operating voltage of the facilities serving any Ohio Edison Delivery Point to a higher voltage without the consent of Buckeye, which consent shall not be unreasonably withheld by Buckeye. In the event of any contemplated increase in the operating voltage at any Delivery Point constituting an Ohio Edison Delivery Point, Ohio shall promptly notify Buckeye to that effect and the contemplated change in such operating voltage shall be effected thereafter only in accordance with such arrangements with respect to the provision of requisite transformers and/or other station facilities and allocation of the cost thereof as shall be mutually agreed upon between Ohio and Buckeye.

4.7 (a) In the event that any Company elects to raise the operating voltage of Power Delivery Facilities to any initial Delivery Point listed in Appendix D hereto at which Delivery Service is being provided at less than

22 Kv, such Company will make such change in delivery voltage only after reasonable notice has been given to Buckeye, so as to permit Buckeye to make or cause to be made the necessary changes in the facilities owned by Buckeye or the affected Buckeye Member and to install such substation and associated facilities as Buckeye or such Buckeye Member may require to accommodate such change and to allow for coordination of such work and of the operations of the parties involved. The Companies shall keep Buckeye advised concerning their plans for any such voltage increase as far in advance of each anticipated change as may be reasonably practicable. Whenever any Company plans to raise the operating voltage of a portion of its Power Delivery Facilities serving an initial Delivery Point at a voltage less than 22 Kv, such Company shall make arrangements to provide Buckeye or the affected Buckeye Member with suitable transformers and other required substation facilities of capacity adequate to supply a load equal to the maximum Delivery Point Hourly Demand established at such Delivery Point during the preceding 12 month period by (i) providing such transformers and other required substation facilities, or (ii) payment in cash of an amount equal to the cost thereof, or (iii) any combination of (i) and (ii). Any equipment removed from a Delivery Point upon provision by a Company of substation facilities as provided in this subsection will become the property of such Company or, if any of such equipment or material is retained by Buckeye for itself or for a Buckeye Member, such Company shall be either reimbursed or given appropriate credit therefor. Buckeye shall bear or cause the affected Buckeye Member to bear the entire cost of any and all additions, changes and conversions of electric lines owned by Buckeye or the affected Buckeye Member and in all instances where Buckeye or such Buckeye Member elects to install transformers and/or related facilities of larger capacity than required to supply the aforesaid maximum established Delivery Point Hourly Demand at such Delivery Point, Buckeye or such Buckeye Member shall bear the additional cost required to provide and install the larger capacity equipment and/or related facilities.

(b) In the event that Buckeye requires and requests an increase in the operating voltage at any initial Delivery Point listed in Appendix D hereto at which Delivery Service is being provided at less than 22 Kv, and if the established Delivery Point Monthly Demand at such Delivery Point resulting from load growth in the affected area is 750 Kw or more, the Company providing such Delivery Service will make 69 Kv, or such other

delivery voltage not lower than 22 Kv as may be prevailing in the area, available at such Delivery Point, and Buckeye shall bear or cause the affected Buckeye Member to bear the entire cost of replacement of any facilities owned by Buckeye or such Buckeye Member which must be changed to be suitable for operation at the higher voltage and the entire cost of any transformers and related substation equipment required by Buckeye or such Buckeye Member; provided, however, that the conditions specified in this subsection shall not be construed to limit the obligation of any Company to provide adequate service to any such Delivery Point as contemplated by Section 4.1.

(c) In the event that the increased delivery voltage provided pursuant to subsections (a) or (b) of this Section is less than 69 Kv any subsequent conversions of such Delivery Point to operation at 69 Kv will be made in accordance with the terms and provisions of Sections 4.5 (b) or 4.6 hereof, as the same may be applicable.

4.8 Any equipment or facilities provided by any Company to a Buckeye Member pursuant to subsection (a) of Section 4.6 or subsection (a) of Section 4.7 shall be the property of such Buckeye Member.

4.9 (a) The parties recognize that, in the event any electrical connection is made within or between the systems of Buckeye and/or the Buckeye Members that electrically connects a particular Delivery Point with another Delivery Point when both such Delivery Points are energized by the Company or Companies providing Delivery Service thereto or that electrically connects a particular Delivery Point through any point of interconnection with any other energized system, certain hazards to the property and employees of the parties concerned may be created. Such electrical connection of Delivery Points may also create problems in respect of load dispatching and accounting. Accordingly, Buckeye shall operate its system facilities and shall cause each Buckeye Member to operate its respective system facilities at all times so that no Delivery Point will be electrically connected with any other Delivery Point or with any other energized system as the result of any electrical connection made within or between any such systems or parts of such systems; provided, however, that certain connections of this kind may be made pursuant to arrangements satisfactory to the Company or Companies concerned and previously set forth in writing; and provided

further that in the event of an emergency due to an outage of a part of the distribution system of a Buckeye Member to which service cannot be restored within a reasonably short time through the Delivery Point from which such part is normally served, such Buckeye Member may at its sole risk (i) perform electrical switching within its system which will electrically connect all or any section or sections of such part with some other part of its system for which Delivery Service is being provided by the same Company, without first notifying such Company, if such part has first been disconnected from any source of supply and is not reconnected to its normal Delivery Point until all switches so closed have been opened, and (ii) take such other action in respect of such emergency as may be specifically authorized by the Company or Companies concerned. Buckeye shall cause the Buckeye Member effecting any such emergency switching to give immediate notice to the Company concerned and, in the case of Buckeye Members served at Delivery Points constituting Ohio Edison Delivery Points, to Ohio Edison Company. Nothing contained herein shall be construed to prohibit Buckeye or a Buckeye Member from switching temporarily any part of its system from the normal source of supply to an alternate source of supply within such system for the purpose of isolating parts of its system for repairs and/or maintenance thereto if such switching does not electrically connect a particular Delivery Point with another source of supply.

(b) Buckeye shall protect, indemnify and save harmless the Companies and each of them from and against all cost, damage or expense (including all costs of any legal proceedings) directly or indirectly resulting from any failure by Buckeye or a Buckeye Member to operate its system facilities in accordance with the provisions of subsection (a) of this Section, whether involving loss of or damage to the property of a Company or loss of or damage to property of Buckeye or such Buckeye Member or loss of or damage to any other person, firm or corporation or injury to any person or other loss, liability, damage or expense of any nature whatsoever. Without limiting the generality of the foregoing, it is understood that the provisions of this subsection shall in all respects apply to any cost, damage or expense incurred by Ohio to Ohio Edison Company or to any person, firm or corporation claiming by, through or under Ohio Edison Company directly or indirectly resulting from any failure by Buckeye or a Buckeye member so to operate its system facilities.

4.10 In the event that any dispute shall arise as to the designation of the Company to provide Delivery Service at a new Delivery Point as contemplated by Section 4.4(a) or in respect of the adequacy of the Delivery Service provided by any Company hereunder, such dispute shall be referred to the Planning Committee. The Planning Committee shall review the contentions of the parties to such dispute, giving consideration, among other things, to the size of the load involved and the facilities which are or may reasonably be made available to service the same, and also giving consideration to standards of service generally prevailing at the time within the State of Ohio, shall maintain a record of the proceedings, a copy of which shall be made available to each of the disputing parties, and shall submit to the parties involved in such dispute a report upon the matter or matters to which such dispute relates and, if appropriate, recommending steps to be taken by the parties for the purpose of resolving the same; provided, however, that no such report shall be rendered unless concurred in by at least nine of the members of the Planning Committee. Any report rendered as contemplated by this Section shall be for advisory purposes only and shall not be binding upon any party hereto but shall be made available to the disputing parties for submission as part of the record to be made in any proceeding instituted pursuant to the provisions of Section 13.6 hereof.

#### ARTICLE FIVE.

##### Determination of Buckeye Power Requirements.

5.1 (a) The Operating Committee shall make or cause to be made load-flow studies of the Power Delivery Facilities of each Company as of a date prior to the Effective Date established by mutual agreement among the Companies, as of the Effective Date and annually subsequent to the Effective Date. Such load-flow studies shall be prepared for various load levels under normal operating conditions in which anticipated generation is economically dispatched to serve predicted load commitments. On the basis of such load-flow studies, the Operating Committee shall prepare or cause to be prepared either tables which will specify a Delivery Loss Correction Factor for the Power Delivery Facilities of each Company as a function of its total load level or formulae by which such Delivery Loss Correction Factors shall be established and applied. The initial table or formula applicable

to each Company and each subsequent revision thereof, together in each case with pertinent supporting information required to perform the study on which such table or formula is based, shall be submitted to such Company and to Buckeye for approval and the last such table or formula so approved shall be the basis for dispatching and accounting for electric power delivered by such Company to the Delivery Points served by it hereunder until subsequently revised and approved as herein provided. The cost of each such load-flow study shall in the normal case be borne by the Company to which the same relates, but the Operating Committee may allocate the cost of any load-flow study between Buckeye and the Company or Companies concerned therein in such proportion as it may determine in any case when it may deem such allocation to be appropriate.

(b) The Operating Committee shall make or cause to be made, in accordance with the principles set forth in subsection (a) of this Section, separate load-flow studies of, and shall prepare or cause to be prepared separate tables showing the Transmission Loss Correction Factor applicable to Ohio's Bulk Transmission Facilities and the Delivery Loss Correction Factor applicable to Ohio's Power Delivery Facilities. The cost of each such load-flow study shall in the normal case be borne by Ohio, but the Operating Committee may allocate the cost of any load-flow study between Buckeye and Ohio in such proportion as it may determine in any case when it may determine such allocation to be appropriate.

(c) The delivery loss correction factors applicable in determining the Ohio Edison Transfer Points Hourly Demand for any hour shall, until changed as hereinafter described, be (i) 1.081 for power scheduled to be supplied between 7:00 A. M. and 10:00 P. M. Eastern Standard Time, Monday through Saturday, except as provided in clause (ii) of this subsection and except holidays as designated by Ohio Edison Company, (ii) 1.094 for power scheduled to be supplied between 5:00 P. M. and 9:00 P. M. Eastern Standard Time during the peak load months of November and December in each year, and (iii) 1.046 for power scheduled to be supplied during all periods not included in clause (i) or clause (ii) above. It is understood that the foregoing delivery loss correction factors and the periods as to which the same are applicable are to be reviewed by Ohio Edison Company, on the basis of principles consistent with those employed in the initial determination thereof, three years after the date on which arrangements between Ohio and Ohio Edison Company for the delivery of electric power and energy to the

Ohio Edison Delivery Points shall become effective and at intervals of three years thereafter during the term of such arrangements and shall be adjusted as appropriate in the light of conditions as they exist at such time. In connection with any such review of the foregoing delivery loss correction factors, Ohio will furnish to Buckeye such information relating thereto and the determination thereof as may be available to or obtainable by Ohio and will submit to Ohio Edison Company such information in respect of operating conditions and other matters as Buckeye may deem relevant for consideration. Ohio will also submit to Ohio Edison Company any proposal in respect of the adjustment of such delivery loss correction factors reasonably requested by Buckeye and mutually agreed upon by Ohio and Buckeye as appropriate to reflect conditions as they exist at the time of such review and will use its best efforts to cause any proposal so submitted to be adopted by Ohio Edison Company.

5.2 Buckeye may by prearrangement with the Company or Companies concerned have a representative present to observe the conduct of any load-flow study made pursuant to subsection (a) or subsection (b) of Section 5.1.

5.3 (a) Commencing with the Effective Date, each Company shall furnish to Ohio's load dispatching center (at Canton, Ohio or such other location as Ohio may designate from time to time) by telephone on an hour-to-hour basis, or by such other means of communication and at such other times as may be agreed upon between Ohio and the other Companies, reports of its total system load on an hour-to-hour basis, and Ohio shall make a record of each Company's System Load and Loss Data based on such load information and the associated Delivery Loss Correction Factor for the hour to which the same relates. As soon as practicable after the end of each calendar month, Ohio shall deliver each Company's System Load and Loss Data for the month just ended to Ohio's General Office in Canton, Ohio, and each Company shall collect and deliver to Ohio's General Office in Canton, Ohio the metering tapes and kilowatthour meter readings for the month just ended from all of the Delivery Points to which it renders Delivery Service; provided, however, that if any Company shall not have completed the installation of demand meters equipped with apparatus for recording hourly demand information pursuant to subsection (b) of Section 10.1, at any Delivery Point or Delivery Points served by it, such Company shall deliver to Ohio's General Office in Canton, Ohio, kilowatthour and demand meter readings and/or data for the month just ended in form which can be used by Ohio for making the determinations then required to be made under this Agreement or the

Station Agreement in accordance with procedures and methods approved and recommended by the Operating Committee. Ohio shall thereupon process each Company's System Load and Loss Data and Delivery Points metering information, together with metering information and other data to be obtained by Ohio in respect of operations at the Ohio Edison Delivery Points from and after the commencement of Delivery Service to the Ohio Edison Delivery Points hereunder, at its computer center for the purpose of making any determinations then required to be made under this Agreement or the Station Agreement.

(b) As promptly as possible after the execution and delivery of this Agreement, each Company will furnish to Ohio and Buckeye such information as may be available to it in respect of the demand for electric power and energy at its points of delivery to any Buckeye Member designated as Delivery Points hereunder during each of the preceding twelve calendar months and will furnish similar information for each month thereafter until the Effective Date. On the basis of the information so furnished, Ohio and Buckeye shall establish by mutual agreement an initial Buckeye System Peak Demand, representing their best estimate of the maximum coincident hourly demand for electric power and energy established at the Delivery Points to which Delivery Service is initially to be provided hereunder during the period of twelve calendar months immediately preceding the Effective Date, and the Buckeye System Peak Demand so established shall be effective on and after the Effective Date until a new Buckeye System Peak Demand shall be established as provided in this Agreement.

5.4 (a) Ohio will furnish to Buckeye information available from the computer center referred to in Section 5.3 relating to the Buckeye Power Requirement and the Delivery Service rendered hereunder as reasonably requested by Buckeye for its statistical, planning or billing purposes. All costs incurred by Ohio in furnishing any such information, including costs incurred in respect of initial programming therefor, shall be borne by Buckeye.

(b) Ohio will furnish to each other Company information available from the computer center referred to in Section 5.3 relating to the Delivery Service rendered by such Company as reasonably requested by it for statistical or planning purposes. All costs incurred by Ohio in furnishing any such information, including costs incurred in respect of initial programming therefor, shall be borne by the Company to which the same is furnished.

(c) In the event that Buckeye should desire a computer study based on computer input data which is available at the computer center referred to in Section 5.3 and consists of information and data necessary to



operations under this Agreement, Ohio will either perform such computer study or make the pertinent computer input data available to Buckeye for that purpose. All costs incurred by Ohio in connection with any computer study undertaken for Buckeye pursuant to the provisions of this subsection (c) shall be borne by Buckeye.

5.5 It is recognized that the quantity of energy scheduled for delivery and/or delivered by Ohio to the other several Companies pursuant to Section 3.3 may, in a given hour, be either greater or less than the Transfer Points Hourly Demand of a particular Company for such hour. Any excess or deficiency in the quantity of energy so delivered to any Company shall be accounted for from time to time between Ohio and such Company as inadvertent interchange or otherwise in such manner as may be established by mutual agreement between Ohio and such Company.

#### ARTICLE SIX.

##### Characteristics of Service; Power Factor.

6.1 The electric power and energy to be delivered to the Delivery Points established hereunder shall be what is known commercially as three-phase 60-cycle alternating current. Buckeye shall cause each Buckeye Member to balance its load requirements on each of the three phases at each of its Delivery Points to the fullest extent practicable.

6.2 Buckeye shall, or shall cause each Buckeye Member to, maintain at the time of peak load at each Delivery Point hereunder where the delivery voltage is 22 kv or more a reactive power demand that is equal to or smaller than 41% of the related Delivery Point Monthly Demand at such Delivery Point, representing a power factor of not less than 92.5%, and at each Delivery Point hereunder where the delivery voltage is less than 22 kv a reactive power demand that is equal to or smaller than 33% of the related Delivery Point Monthly Demand at such Delivery Point, representing a power factor of not less than 95%, and any Company affected by the failure of Buckeye or any Buckeye Member so to do may notify Buckeye to that effect, and Buckeye shall, or shall cause such Buckeye member to, take the necessary corrective action. The parties recognize and agree that in certain instances and for certain periods of time a lower power factor may be tolerated by a Company at some Delivery Point without undue burden and in such instances

the Company involved shall be the sole judge of the measure or extent of the corrective action necessary.

6.3 Notwithstanding the provisions of Section 6.2, Buckeye will cause each Buckeye Member served from Delivery Points constituting Ohio Edison Delivery Points to use its best efforts to maintain a power factor of not less than 95% at each such Delivery Point at time of peak load and will pay to Ohio, as provided in Section 8.4, any amounts included in the monthly charge payable by Ohio to Ohio Edison Company for the delivery of electric power and energy to the Ohio Edison Delivery Points attributable to the failure of any Buckeye Member to maintain a power factor of not less than 95% at any such Delivery Point at time of the billing demand in effect for such month, based on billing demand data submitted by Ohio Edison Company to Ohio for such month, plus an amount sufficient to reimburse Ohio for any payment made or owing by it to Ohio Edison Company to adjust for taxes applicable to such amounts.

6.4 Buckeye will cause each Buckeye Member served from Delivery Points constituting Ohio Edison Delivery Points to take such action as will be reasonably adequate to assure that at each such Delivery Point the power factor will at no time be a leading power factor; provided, however, that the parties recognize that in certain instances and for certain periods of time a leading power factor may be tolerated at a particular Ohio Edison Delivery Point without undue burden on Ohio Edison, and in such instances Buckeye will cause the Buckeye Member concerned to take such corrective action as may be specified by Ohio with respect thereto.

## ARTICLE SEVEN.

### Committees.

7.1 There shall be an Operating Committee and a Planning Committee, each of which shall consist of an authorized representative appointed by each of the Companies and an equal number of representatives appointed by Buckeye. Each party hereto shall evidence its appointment or appointments to the Operating Committee and the Planning Committee by written notice to the other parties and, by similar notice, any party may change its repre-

sentative or representatives on either of such Committees at any time. The parties shall be entitled to appoint alternate members of the Operating Committee and of the Planning Committee who shall be entitled to sit at meetings thereof in the absence of the regularly appointed member and to exercise at such meetings the powers of such absent member.

7.2 The responsibilities of the Operating Committee shall be to study and recommend coordinated control and operating procedures and procedures for power and energy dispatching and accounting. The Operating Committee shall establish as of the Date of Commercial Operation of the first Initial Unit a subcommittee to study and recommend procedures for power and energy dispatching and accounting for normal and for abnormal operating conditions and a subcommittee which will be responsible for determination of the Transmission Loss Correction Factor and of Delivery Loss Correction Factors. The Operating Committee may from time to time establish such other subcommittees as it shall deem necessary or desirable.

7.3 The responsibilities of the Planning Committee shall be to review periodically the adequacy of Ohio's Bulk Transmission Facilities and the Power Delivery Facilities and to conduct or have conducted such studies as may be necessary to investigate and consider any problems which may arise in connection with the Delivery Service. The Planning Committee shall maintain a "master plan" of all existing or projected Delivery Points and of pertinent existing or contemplated Power Delivery Facilities and facilities of Buckeye and the Buckeye Members with a view to the coordinated development of the Power Delivery Facilities and the related facilities of Buckeye and the Buckeye Members on a sound engineering basis and without unnecessary duplication. Such "master plan" shall be revised annually and shall be maintained to the extent practicable for periods of two years, five years and ten years in advance. The Planning Committee shall collect statistical data pertinent to the Delivery Service and the planning of new Delivery Points and shall prepare load forecasts for periods of two years, five years and ten years in advance. The Planning Committee may from time to time establish such subcommittees as it may deem necessary or desirable to carry out its duties and responsibilities hereunder.

7.4 The Operating Committee and the Planning Committee each shall meet at least once annually or more often as required.

7.5 The expenses of each member of the Operating Committee and each member of the Planning Committee shall be borne by the party by whom he was appointed.

7.6 The Companies and Buckeye shall furnish to the Operating Committee and to the Planning Committee such statistical data and other information as may reasonably be required by said Committees to enable them to carry out their respective duties and responsibilities hereunder.

7.7 Neither the Operating Committee nor the Planning Committee shall be entitled or empowered to take any action purporting to bind any Company, Buckeye or any Buckeye Member unless expressly authorized in writing so to do. Without limiting the generality of the foregoing, the "master plan" referred to in Section 7.3 hereof shall be for advisory purposes only, shall not be binding upon any party hereto for any purpose and shall not be subject to arbitration pursuant to Section 13.6 hereof should dispute arise with respect thereto.

#### ARTICLE EIGHT.

##### Charge for Delivery Service.

8.1 The Companies hereby designate Ohio as their agent to render monthly bills to Buckeye covering charges due for the Delivery Service provided by them hereunder, which charges shall be computed by Ohio in accordance with the provisions of this Article Eight, to collect from Buckeye such monthly charges, and to allocate and distribute to each of them the appropriate share of the total monthly charges so billed and collected. A copy of each monthly bill rendered by Ohio to Buckeye pursuant to this Section shall be concurrently mailed by Ohio to each of the other Companies, together with advice as to the allocation among the several Companies of the total monthly charge covered thereby.

8.2 Buckeye shall pay monthly for the Delivery Service to be rendered by the Companies hereunder (including the Delivery Service to be rendered by Ohio as herein provided at the Delivery Points constituting Ohio Edison Delivery Points) an amount in dollars equal to the sum of (a) the product of (i) one-twelfth (1/12) of the Annual Delivery Charge Rate per Kw and (ii) the Buckeye System Peak Demand applicable to such month, and

(b) an amount in dollars sufficient to reimburse the Companies for any amounts paid or payable by them as sales, excise or similar taxes (other than taxes based on or measured by net income) in respect of the total amount paid by Buckeye pursuant to this Section and to enable the Companies, after provision for such taxes, to realize the net amount payable by Buckeye as provided in clause (a) above.

8.3 The Annual Delivery Charge Rate per Kw shall be five dollars and sixty-five cents (\$5.65) until adjusted as hereinafter provided, and shall be adjusted at the end of the sixth full calendar year following the year in which all or any part of the Buckeye Power Requirement is first made available to Buckeye pursuant to this Agreement and annually thereafter in the manner specified in Appendix C hereto. Any adjustment so made shall become effective on the July 1 next following.

8.4 In addition to the amount payable by Buckeye for the Delivery Service to be provided as contemplated by this Agreement, Buckeye shall also pay to Ohio monthly such amounts, if any, as may be payable by it to Ohio pursuant to Section 6.3, and any amounts so paid to Ohio by Buckeye shall be credited by Ohio to the account of the Companies in allocating the amount received from Buckeye for the Delivery Service so provided among the several Companies pursuant to Article Nine hereof as provided in subsection (f) of Section 9.1.

8.5 As soon as practicable after the end of each calendar month Ohio shall render a bill to Buckeye for the total amount owed by Buckeye pursuant to Section 8.2 for the Delivery Service provided during such month and shall also render a bill to Buckeye for any amount owed by Buckeye to Ohio pursuant to Section 8.4 applicable to such month. Bills rendered to Buckeye as aforesaid shall be paid by Buckeye within fifteen (15) days after the receipt thereof but such bills shall be subject to any subsequent corrections which may be appropriate as a result of reviews or audits made for the purpose of verification or otherwise. Interest shall be paid by Buckeye at the rate of 6% per annum on any overdue amount.

8.6 Buckeye shall have no responsibility in respect of the allocation and distribution of charges for the Delivery Service provided hereunder collected by Ohio as herein provided.

**ARTICLE NINE.****Allotment of Delivery Charges Among Companies.**

9.1 Ohio shall allocate monthly among the Companies, by the following method, the amount received from Buckeye for the Delivery Service provided as contemplated by this Agreement:

- (a) The facilities which are to be included in each Company's Power Delivery Facilities and the gross amount of such Company's investment therein shall be established as of the date hereof by a subcommittee consisting of the six Company-appointed representatives on the Operating Committee, or such other representative for any Company as such Company may designate. Such subcommittee shall also determine the peak kilowatt demand established by each Company during any clock-hour during the 12 months prior to the date hereof on its system facilities located within the State of Ohio, which, in the case of each Company, other than Ohio, shall be its maximum kilowatt load during such period as measured by the sum of (i) the net amount of power (plus or minus) received or delivered for any hour by such Company at the Ohio State line or within the State of Ohio (A) through connections or interconnections with other systems, (B) through facilities of such Company which extend from another State into the State of Ohio, and (C) from generating units of such Company located within the State of Ohio, (ii) plus the amount of power scheduled or contracted for firm delivery for such hour by such Company to other systems, (iii) plus the amount of power scheduled or contracted for delivery into the system of such Company for such hour under wheeling contracts with others than Buckeye or any Buckeye Member providing for the delivery by such Company of power for others, and (iv) minus the amount of power delivered for such hour to facilities specifically provided and exclusively utilized to deliver any load commitment delivered directly from a generating plant bus (except to the extent that such load is supplied from a generating unit or units not owned by such Company), and, in the case of Ohio, shall mean the peak kilowatt demand determined pursuant to paragraph (b) of Appendix C hereto, minus (x) the amount of power scheduled or contracted for firm delivery during such period directly from Ohio's Bulk Transmission Facilities, and (y) the amount of power delivered

for others during such period over Ohio's Bulk Transmission Facilities to systems other than those of Buckeye or any Buckeye Member.

- (b) The investment value of each Company's Power Delivery Facilities shall be determined as of the date hereof by dividing (i) such Company's investment in its Power Delivery Facilities by (ii) such Company's peak kilowatt demand in each case as established pursuant to subsection (a) above provided, however, that in the case of any Company the Power Delivery Facilities of which consist of Power Delivery Facilities of the character referred to in both clauses (a) and (b) of the definition of such term contained in Section 1.1, the subcommittee referred to in subsection (a) above shall separately identify the Power Delivery Facilities of such Company which constitute Power Delivery Facilities of the character referred to in said clause (b) and the gross amount of such Company's investment therein, shall separately determine the peak kilowatt demand established by such Company on such Power Delivery Facilities during the 12 months prior to the date hereof in accordance with principles as nearly as may be possible consistent with the principles specified in subsection (a) above for the determination of such Company's system peak kilowatt demand and shall determine the investment value of such Company's Power Delivery Facilities by computation giving effect to such principles of weighting as may be established by mutual agreement among the representatives of the several Companies constituting said subcommittee as appropriate to reflect differences in the nature and functions of the Power Delivery Facilities of such Company of the character referred to respectively in said clauses (a) and (b) and differences in the nature and amounts of the demands thereon. The investment values so determined shall be adjusted for each Company in the manner provided in subsection (a) above and in this subsection as of the Effective Date, and such adjusted investment values shall be subject to review and further adjustment in the same manner annually at the request of any Company whenever a significant change in the investment value of the Power Delivery Facilities of such Company shall have occurred. Each determination of investment value made as provided in this subsection shall be subject to approval by all the Companies and upon such approval shall thereafter be used for purposes of the allocations to be made hereunder until again adjusted and approved as contemplated hereby.

- (c) An investment ratio shall be obtained for each Company for any month by dividing (i) such Company's investment value in effect for such month by (ii) the investment value in effect for Ohio for such month.
- (d) A demand ratio shall be obtained for each Company for any month by dividing (i) the largest Delivery Points Monthly Demand (all Delivery Points) of such Company established during the 12-month period ending with such month by (ii) the sum obtained by adding, for all Companies, the largest Delivery Points Monthly Demand (all Delivery Points) separately determined for each Company during the same 12-month period. Delivery Points constituting Ohio Edison Delivery Points, and the Delivery Points Monthly Demand at such Delivery Points, shall not be taken into account in any computation made under this subsection. The sum of the demand ratios so obtained for the Companies for any month must equal unity (1.000).
- (e) An allotment ratio shall be obtained for each Company for any month by (i) obtaining the product of the investment ratio for such Company determined pursuant to subsection (c) above and the demand ratio for such Company determined pursuant to subsection (d) above, and (ii) dividing such product by the sum of such products for all of the Companies. The sum of the allotment ratios so obtained for the Companies for any month must equal unity (1.000).
- (f) The amount payable to each Company out of the amount paid by Buckeye pursuant to Section 8.2 for the Delivery Service provided as contemplated by this Agreement in each month during the term hereof shall be determined (i) by subtracting from the charge payable by Ohio to Ohio Edison Company for the delivery of electric power and energy to the Ohio Edison Delivery Points in such month the amount, if any, payable by Buckeye to Ohio pursuant to Section 8.4, (ii) by subtracting the remainder obtained under clause (i) from the total dollar amount paid by Buckeye for the Delivery Service so provided, and then (iii) by multiplying the remainder obtained under clause (ii) by such Company's allotment ratio obtained pursuant to subsection (e) above.

9.2 The basic equation for the method of allocation described in Section 9.1 is developed in Appendix H hereto.



9.3 Ohio shall pay the appropriate allotted amount (determined as provided in Sections 9.1 and 9.2) out of the total amount paid by Buckeye for any month pursuant to Section 8.2 to each Company within five (5) business days after receipt of such payment from Buckeye, but each such payment made by Ohio to each Company shall be subject to such subsequent adjustments as may be appropriate as a result of reviews or audits made for the purpose of verification or otherwise. Ohio shall also pay all charges payable by it to Ohio Edison Company for the delivery of electric power and energy to the Ohio Edison Delivery Points and neither Buckeye nor any of the other Companies shall have any responsibility whatsoever in respect thereof. Ohio will not agree to any increase in the charges payable to Ohio Edison Company for the delivery of electric power and energy to the Ohio Edison Delivery Points unless the other Companies shall have given their prior consent thereto.

#### ARTICLE TEN.

##### Metering Equipment.

10.1 (a) Each Company shall locate, own and maintain metering equipment for the Delivery Service to be rendered by it hereunder as necessary to provide complete information regarding the delivery of power and energy for dispatching and billing purposes. Buckeye shall cause each Buckeye Member to take such action as is necessary to permit authorized Company representatives to enter upon the property on which such metering equipment is located for the purpose of inspecting, reading and maintaining such meters. Buckeye may, at its option and expense, install check meters at such metering point and shall be permitted to use Company-owned instrument transformers for that purpose, providing that such use does not exceed the burden limit of such transformers. Each Company shall permit authorized Buckeye representatives to enter upon any property of such Company on which such check meters are located for the purpose of inspecting, reading and maintaining such meters. Upon request by Buckeye and at Buckeye's expense, Ohio shall install check meters at each of the Ohio Edison Delivery Points and shall designate representatives of Buckeye as authorized representatives of Ohio for the purpose of inspecting and reading any such check meters. Any metering equipment provided in accordance herewith shall be of a type deemed suitable for its purpose hereunder by the Operating Committee.

(b) Each Company agrees to install and put into operation, as soon as practicable, at the Delivery Points to be served by it, kilowatt demand meters equipped with apparatus for recording hourly demand information on tape (or such other recording medium as may be agreed upon by the parties) which will be suitable for processing and use in Ohio's computer center as provided in Section 5.3.

10.2 The demand meter tapes shall be collected by a representative of the Company that owns such demand meters at intervals prescribed by the Operating Committee and shall be furnished to Ohio for processing as hereinbefore provided in Article Five hereof. The kilowatthour meters shall be read by a representative of the Company that owns such meters at the same time that the demand meter tapes are collected, and the amounts of energy registered for such month shall be furnished to Ohio. The parties hereto recognize and agree that it is not practicable to read all kilowatthour meters at precisely the same time at the end of each calendar month and, for this reason, the amounts of Delivery Point Monthly Energy will be obtained by totalling the Delivery Point Hourly Demands for any Delivery Point for such calendar month from the demand tapes at the computer center, and the information provided for such month by the kilowatthour meters shall be used for checking purposes after appropriate corrections for reading times are made. Buckeye shall be entitled at its request to review the information so provided for any month.

10.3 Meters used in determining the demand and amount of electric energy constituting the Buckeye Power Requirement delivered hereunder shall, by comparison with accurate standards, be tested and calibrated by the Company that owns such meters at intervals not to exceed twelve months. If any meter shall be found incorrect or inaccurate, it shall be restored to the extent possible to a 100% accurate condition or a new meter shall be substituted so that, as far as possible, 100% accuracy shall always be maintained. Buckeye shall have the right to request that a special meter test be made at any reasonable time. If any test made at Buckeye's request discloses that the meter tested is registering correctly or within 1% of 100% accuracy at full load, Buckeye shall bear the expense of such test. The expense of all other tests shall be borne by the Company that owns the meter tested.

10.4 Each Company agrees to notify Buckeye whenever such Company makes a test of such meter so that Buckeye can have its representative present, if it so wishes, when the test is made. The results of all such tests and calibrations shall be open to examination by Buckeye and a report of every requested test shall be furnished to Buckeye. Any meter tested and found to be not more than 1% above or below 100% accuracy at full load shall be considered to be correct and accurate insofar as correction of billing is concerned. If, as a result of any test, any meter is found to register in excess of 1% either above or below 100% accuracy at full load, then the readings of such meter previously taken for billing purposes shall be corrected according to the percentage of inaccuracy so found, but no correction shall be made for a period longer than the period during which it may be determined by mutual agreement of the parties involved that the inaccuracy existed and in no event shall correction be made in respect of any billing period earlier than the last regular monthly billing period completed prior to the day on which the inaccuracy is discovered by such test.

10.5 For any period that any meter is found to have failed wholly or in part to register and for which no alternate metering is available and for any period in respect of which meter data may be lost or destroyed, it shall be assumed that the demand established, or electric energy delivered, as the case may be, during said period is the same as that for a period of like operation during which such meter was in service and operating, taking into account any special circumstances existing during any such period known to the parties. Any estimate required to be made pursuant to this Section shall be made by the Company responsible for the meters or metering equipment involved and such Company shall notify Ohio and Buckeye as to the basis of any estimate so made and shall provide to Ohio and Buckeye a written description thereof.

#### ARTICLE ELEVEN.

##### Classification of Energy.

11.1 It is the intention of the parties hereto that operations hereunder shall be so conducted that (a) electric energy delivered to Buckeye at the Delivery Points established hereunder and sold by Buckeye to the Buckeye

Members shall be consumed wholly within the State of Ohio, and (b) electric energy supplied to Buckeye for sale to the Buckeye Members shall be supplied wholly from generation at the Cardinal Station or at other generating stations within the State of Ohio.

11.2 In accordance with the intention of the parties set forth in Section 11.1, the Companies and Buckeye hereby agree that, during any applicable period of measurement:

- (a) Whenever the total net generation at the Cardinal Station shall equal or exceed that quantity of electric energy which is delivered pursuant to this Agreement at the points of interconnection of Ohio's Bulk Transmission Facilities with the Power Delivery Facilities of all of the Companies and at Ohio's Points of Interconnection with Ohio Edison, plus the transmission losses applicable thereto to the Cardinal Station, the entire quantity of electric energy so delivered shall be classified as electric energy generated at the Cardinal Station.
- (b) Whenever the total net generation at the Cardinal Station shall be less than that quantity of electric energy which is delivered pursuant to this Agreement at the points of interconnection of Ohio's Bulk Transmission Facilities with the Power Delivery Facilities of all of the Companies and at Ohio's Points of Interconnection with Ohio Edison, plus the transmission losses applicable thereto to the Cardinal Station, the entire quantity of electric energy so delivered shall be classified as electric energy generated at the Cardinal Station to the extent of the total net generation at the Cardinal Station and the balance thereof shall be classified as electric energy generated at other generating stations of Ohio located within the State of Ohio.
- (c) Whenever the aggregate quantity of electric energy delivered by the Companies at all Delivery Points established and from time to time in operation as provided in this Agreement, plus losses applicable thereto to Ohio's Bulk Transmission Facilities, shall be equal to or less than that quantity of electric energy which is delivered from Ohio's Bulk Transmission Facilities pursuant to this Agreement by Ohio to the Companies and by Ohio to Ohio Edison Company, the entire quantity of the electric energy so delivered at all such Delivery Points shall be classified as electric energy generated at the Cardinal

Station and/or at other generating stations of Ohio located within the State of Ohio in accordance with the procedures specified in subsections (a) and (b) above.

- (d) Whenever the aggregate quantity of electric energy delivered by the Companies at all Delivery Points established and from time to time in operation as provided in this Agreement, plus losses applicable thereto to Ohio's Bulk Transmission Facilities, shall be more than that quantity of electric energy which is delivered from Ohio's Bulk Transmission Facilities pursuant to this Agreement by Ohio to the Companies and by Ohio to Ohio Edison Company, the entire quantity of the electric energy so delivered at all such Delivery Points shall be classified as electric energy generated at the Cardinal Station and/or at other generating stations of Ohio located within the State of Ohio in accordance with the procedures specified in subsections (a) and (b) above pro rata to the extent of that quantity of electric energy which is so delivered by Ohio from Ohio's Bulk Transmission Facilities and the balance thereof shall be classified in the case of each Company and of Ohio Edison Company as electric energy generated at their respective generating stations located within the State of Ohio.

11.3 It is expressly understood by all parties hereto that (a) none of Ohio's Bulk Transmission Facilities shall be used to transmit electric power and energy for Buckeye other than electric power and energy required to supply the Buckeye Power Requirement, and (b) that neither Ohio's Bulk Transmission Facilities nor the Power Delivery Facilities of any Company shall be used to deliver electric power and energy to Buckeye at any Delivery Point established hereunder other than electric power and energy for ultimate consumption within the State of Ohio required to supply that portion of the Buckeye Power Requirement existing at such Delivery Point, except in either case with the prior written consent of the Companies.

11.4 The Companies and Buckeye shall establish and carry out such procedures as may be necessary to effectuate the provisions of this Article Eleven, and Buckeye shall cause each Buckeye Member to take such action as may be necessary to enable Buckeye to comply with the procedures so established.

**ARTICLE TWELVE.****Effective Date and Term of Agreement.**

12.1 This Agreement shall become effective on the date on which the last of the following events shall have occurred:

- (a) The Rural Electrification Administration (i) shall have approved in writing the Wholesale Power Agreements made between Buckeye and each of the Buckeye Members and (ii) shall have approved in writing the Purchase Agreement, the Station Agreement and this Agreement or shall deliver to Buckeye and Ohio written advice to the effect that such approval is not required;
- (b) The Public Utilities Commission of Ohio shall have issued an order authorizing and approving the arrangements provided for in the Purchase Agreement, the Station Agreement and this Agreement and such order shall have become effective in accordance with such terms and conditions as may be therein contained;
- (c) The Station Agreement, this Agreement and/or any rate schedule, tariff or instrument specified in the order referred to in clause (b) of this Section shall have been filed with the Public Utilities Commission of Ohio;
- (d) The Federal Power Commission shall have either (i) entered an order disclaiming jurisdiction over the transactions provided for in the Purchase Agreement, the Station Agreement and this Agreement and over the rates, charges and classifications provided for in the Station Agreement and in this Agreement, including future changes in any such rates, charges and classifications effected in accordance with the principles specified in the Station Agreement and in this Agreement, as the case may be, or (ii) entered an order under the Federal Power Act expressly authorizing, to the extent it has jurisdiction, consummation of the transactions provided for in the Purchase Agreement upon the terms and conditions therein specified and expressly approving, as one of the terms and conditions of such order, the terms and conditions specified in the Station Agreement and in this Agreement, without prejudice to the right of any party to the Purchase Agreement, the Station Agreement or this Agreement to contest at any subsequent time the jurisdiction of the Federal Power Commission over any of

the transactions contemplated by the Purchase Agreement, the Station Agreement or this Agreement and to contest any assertion of jurisdiction by the Federal Power Commission over any party to the Purchase Agreement, the Station Agreement or this Agreement as a "public utility" within the meaning of the Federal Power Act, as amended;

- (e) If the order referred to in clause (d) above shall have been entered in a proceeding in which any party or parties in addition to Buckeye and Ohio participated, such order shall have become final and shall not be subject to review under Section 313 of the Federal Power Act;
- (f) If proceedings to review the order referred to in clause (d) above shall have been initiated by any party, an order of a court of competent jurisdiction affirming such order in all respects shall have become final and shall not be subject to further review; and
- (g) Buckeye shall have acquired from Ohio a generating unit and related facilities at the Cardinal Station as contemplated by the Purchase Agreement.

Each of the Companies will use its best efforts to take or cause to be taken such action requisite on its part to the end that the foregoing events shall occur and that this Agreement shall become effective as provided in this Section at the earliest practicable date.

12.2 If this Agreement shall become effective as provided in Section 12.1, then the Transmission Service and the Delivery Service to be rendered pursuant to this Agreement shall commence on the Effective Date; provided, however, that the Transmission Service to Ohio's Points of Interconnection with Ohio Edison and the Delivery Service at the Delivery Points constituting Ohio Edison Delivery Points shall commence on the effective date of the termination of power purchase agreements between Ohio Edison Company and the Buckeye Members referred to in Appendix F hereto or on such later date when Ohio Edison Company shall commence delivery of electric power and energy to Ohio at the Ohio Edison Delivery Points. All provisions of this Agreement relating to Transmission Service to Ohio's Points of Interconnection with Ohio Edison and to Delivery Service at Delivery Points constituting Ohio Edison Delivery Points, and all obligations of Ohio hereunder in respect thereof, shall be subject to the proviso contained in the immediately preceding sentence. Buckeye will give written notice to Ohio of the date of termination of the power purchase agreements between Ohio

Edison Company and the Buckeye Members listed in Appendix F hereto not less than six months prior to the date on which such termination is to occur, and Ohio will use its best efforts to the end that Delivery Service at the Ohio Edison Delivery Points will commence on and as of the date of termination of such power purchase agreements.

12.3 If this Agreement shall become effective as provided in Section 12.1, it shall continue in effect for an initial term of thirty-five (35) years from the Effective Date. Buckeye and the Companies shall commence negotiations in respect of extension or termination of this Agreement not less than seven (7) years prior to the end of such initial term.

12.4 Notwithstanding the provisions of Sections 12.1, 12.2 and 12.3, this Agreement shall terminate and be of no further force and effect upon termination of the Station Agreement for any reason.

#### ARTICLE THIRTEEN.

##### General.

13.1 The parties hereto recognize that this Agreement and the Station Agreement are subject to the jurisdiction of the Public Utilities Commission of Ohio, that this Agreement, the Station Agreement and the Wholesale Power Agreements may be claimed by the Federal Power Commission to be subject to its jurisdiction under the Federal Power Act, and that each of the aforesaid Agreements is subject to such lawful action as any regulatory authority having jurisdiction shall hereafter take with respect thereto.

13.2 The parties hereto agree that, in the event that the Annual Transmission Charge Rate per Kw or the Annual Delivery Charge Rate per Kw or any other term or condition of this Agreement shall become the subject of a proceeding before any regulatory agency, the parties will cooperate and use their best efforts to defend the same; provided, however, that no Company shall be required to enter an appearance in any such proceeding or otherwise to participate as a party therein if, in the judgment of such Company, it is not subject to the jurisdiction of such regulatory agency and such appearance or participation could adversely affect its status in respect of such jurisdiction.

13.3 (a) Buckeye agrees that, during the term of this Agreement, it will supply under Wholesale Power Agreements from the facilities acquired or made available to Buckeye under the Purchase Agreement, the Station Agreement and this Agreement all of the requirements of the Buckeye Members for electric power and energy up to the extent of its maximum entitle-



ment to the output or use of such facilities as provided in the Station Agreement or in this Agreement and will not (i) consent to any assignment of any Wholesale Power Agreement under Section 16 thereof, or (ii) permit any sale, transfer or other disposition of any portion of the properties, business or other assets of a Buckeye Member, if such action in any such case would be inconsistent with the obligation of Buckeye under this subsection to supply such requirements from such facilities.

(b) Buckeye further agrees that during the term specified in Section 13 of the Wholesale Power Agreements, (i) it will not consent to any modification or amendment to Sections 1, 2, 10 or 13 of the Wholesale Power Agreements, or waive any obligation of any Buckeye Member thereunder, or consent to the termination or cancellation of any Wholesale Power Agreement, if the effect of any such modification, amendment, waiver, termination or cancellation would at any time be to reduce the revenues of Buckeye under the Wholesale Power Agreements to an amount which, together with the revenues and income of Buckeye from all other sources, will not be sufficient to meet the cost of the operation and maintenance (including but not limited to replacements, insurance, taxes and administrative and general overhead expense) of its generating plant (including any amounts payable under the Station Agreement), transmission system and related facilities, the cost of any electric power and energy purchased for resale under the Wholesale Power Agreements, the cost of transmission, delivery or other services provided or arranged for by Buckeye (including any amounts payable under this Agreement) and payments on account of principal and interest on all indebtedness of Buckeye, and (ii) it will not, without the prior written consent of Ohio, (A) consent to or permit any amendment or modification of Sections 3, 8, 9, 12, 16, 17 and 18 of the Wholesale Power Agreements, or waive any obligation of any Buckeye Member to be performed thereunder, or (B) establish policies, procedures or practices applicable to the Buckeye Members except on a basis consistent with the provisions and conditions contained in Article Four of this Agreement. Buckeye will give written notice to Ohio, with copy to each of the other Companies, of any intended amendment or modification of the above enumerated Sections of any Wholesale Power Agreement, or any intended waiver of any obligation of a Buckeye Member thereunder, or any consent granted by Buckeye pursuant to Sections 16 or 18 of the Wholesale Power Agreements, not less than thirty (30) days prior to the proposed effective date of such amendment, modification, waiver or con-

sent. It is recognized that, in connection with any consent requested by Buckeye under this subsection, Ohio will consult with any other Company or Companies the rights or obligations of which hereunder may be affected by the action to which consent relates, and Ohio will not give any consent so requested without the concurrence of the Company or Companies so affected.

13.4 The obligations of each party to this Agreement shall be several and not joint or joint and several and shall apply only in respect of its own facilities and operations. No party hereto shall be responsible for the consequences of the negligence or fault of any other party. Each party agrees to hold all other parties hereto harmless from and against any claim for injuries or damages suffered by its employees, third parties or members of the public to the extent that any such claim may arise out of or be attributable to the construction or use of that part or portion of the facilities owned by such party which are provided for use hereunder or as herein provided and, in addition, in the case of Buckeye, to the construction or use of facilities owned by any Buckeye Member.

13.5 If at any time there shall be a dispute or difference of opinion in respect of the amount of any payment to be made by one party to another hereunder, then on or prior to the date herein fixed for the payment thereof the billed party shall pay the amount thereof which it admits to be due and at the same time shall pay to the billing party under protest all or any part of any amount in dispute, and shall deliver to the billing party a written statement of the reasons why any amount claimed to be due is being disputed, and the issues in connection therewith shall be submitted to arbitration pursuant to Section 13.6. Upon determination of the dispute, the billing party shall refund to the billed party any portion of the amount in dispute paid by the billed party in excess of the amount held to have been due, and billed party shall pay to the billing party any amount by which the amount paid was less than the amount held to have been due. Interest at 6% per annum shall be paid from the payment date to the date of any subsequent payment or refund, as the case may be. No payment made or received under this Section shall be construed to effect a waiver or release of rights by any party or to prejudice the rights of any party to additional payment or refund, as the case may be.

13.6 Any controversy, claim, counter-claim, defense, dispute, difference or misunderstanding arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration before a board of three arbitrators designated as hereinafter provided. Any party demanding arbitration of any such controversy, claim, counter-claim, defense, dispute, difference or misunderstanding shall serve notice in writing upon all other parties hereto describing in detail the matter in respect of which arbitration is demanded and the parties shall thereupon endeavor to agree upon an arbitration board before which the arbitration proceeding shall be conducted. If the parties hereto shall fail to agree upon an arbitration board within thirty days from the date of the original notice demanding arbitration, the party demanding arbitration may, upon written notice to all other parties hereto, apply to the person who is the senior acting judge of the United States Court of Appeals for the judicial circuit of the United States within the boundaries of which the City of Columbus, Ohio is located for the appointment by such person or in such manner as he may direct of an arbitration board to conduct the arbitration proceeding. The arbitration proceeding shall be conducted in accordance with the Rules of the American Arbitration Association then in effect, and judgment upon any award rendered by the arbitration board therein may be entered in any court having jurisdiction thereof. This provision shall survive the termination of this Agreement. The parties expressly agree that this provision shall constitute a condition precedent to the institution of any proceeding in any court relating to the subject matter hereof.

13.7 (a) The Companies shall not be held responsible or liable for any loss or damage to Buckeye or any Buckeye Member on account of non-delivery of energy hereunder at any time caused by Act of God, fire, flood, explosion, strike, civil or military authority, governmental action or inaction, insurrection or riot, enemy attack, malicious mischief, act of the elements, outage of equipment or facilities, or any other cause beyond their control; provided, however, that the Companies, and each of them, shall use its best efforts to restore the availability of such energy with utmost dispatch. Failure of the Companies or any Company to make any such energy available because of the aforesaid conditions shall not relieve Buckeye of its obligation to make the payments provided for herein.

(b) Ohio shall not be held responsible or liable for any loss or damage to any Company on account of the failure to make available to such

Company that portion of the Buckeye Power Requirement to be delivered by it hereunder at any time caused by Act of God, fire, flood, explosion, strike, civil or military authority, governmental action or inaction, insurrection or riot, enemy attack, malicious mischief, act of the elements, outage of equipment or facilities, or any other cause beyond its control, but Ohio shall use its best efforts to restore the availability thereof with utmost dispatch. Failure of Ohio to make such portion of the Buckeye Power Requirement available to any Company because of the aforesaid conditions shall not relieve such Company of its obligation to supply the same for delivery to Buckeye in accordance with the provisions of this Agreement, from generating sources available to it within the State of Ohio, to the best of its ability to do so consistent with its obligations to its other customers; provided, however, that Ohio will return to such Company an equivalent amount of electric energy from the Cardinal Station, from Ohio's Ohio Generating Stations, or from any combination of such sources at such times and in such manner as shall be mutually agreed upon between Ohio and such Company.

13.8 In the event that the United States of America (acting through the Administrator of the Rural Electrification Administration) shall, upon lawful exercise of powers conferred upon it by or under the Rural Electrification Act of 1936, as amended, acquire substantially all the assets, property and business of a Buckeye Member as a result of foreclosure proceedings brought by it against such Buckeye Member and shall thereafter operate the assets, property and business so acquired pending liquidation or other disposition thereof, then, notwithstanding any other provision of this Agreement, the United States of America may be treated as a Buckeye Member to the extent required to permit operation by it of the assets, property and business so acquired for such period, up to but not exceeding five years after its acquisition of such assets, property and business, as it shall continue to operate the same pending such liquidation or other disposition.

13.9 All notices under this Agreement shall be in writing and shall be sufficient in all respects if delivered in person or sent by registered mail or certified mail addressed to the parties hereto at the addresses specified below or at such other address for any party as shall be specified by such party by notice given as provided in this Section:

Name	Address
Buckeye Power, Inc.....	4302 Indianola Avenue Columbus, Ohio

Name	Address
Ohio Power Company.....	301 Cleveland Avenue S. W. Canton, Ohio
The Cincinnati Gas & Electric Company	Box 960 Cincinnati, Ohio
Columbus and Southern Ohio Electric Company.....	215 North Front Street Columbus, Ohio
The Dayton Power and Light Company..	25 North Main Street Dayton, Ohio
The Toledo Edison Company.....	420 Madison Avenue Toledo, Ohio
Monongahela Power Company.....	Fifth Street Marietta, Ohio
	Copy to 1310 Fairmont Avenue Fairmont, West Virginia

Each party shall furnish to the others a telephone number which may be used for the giving of immediate notice in emergency situations, and notice of emergency interconnections effected pursuant to subsection (a) of Section 4.9 shall be given by telephone call to the Company concerned at the number so furnished by it. Contemporaneously with the delivery or mailing thereof, a copy of any notice delivered or mailed by Buckeye to any other Company or by any other Company to Buckeye shall be similarly delivered or mailed to Ohio for informational purposes.

13.10 Any party hereto shall have the right, at any reasonable time during the term of this Agreement and any extensions thereof, and for five years thereafter, to inspect such books, records and accounts, and metering information as pertain to the dispatching of or billing for the Buckeye Power Requirement, or the allocation of such billing among the Companies, and to make such audits thereof as such party deems necessary to protect its rights and interests; provided, however, that nothing contained in this Section is intended or shall be construed to require any party hereto to maintain

books, records or accounts for any period longer than as specified for the maintenance thereof in regulations promulgated by regulatory agencies having jurisdiction in the premises. Ohio shall advise Buckeye as to the findings or agreements reached in determinations of investment values pursuant to subsection (b) of Section 9.1.

13.11 Each Company shall keep such records or accounts, which need not be its basic accounts and may be maintained in memorandum or other appropriate form, as will permit determinations to be made from time to time hereunder pursuant to specified accounts of the Uniform System of Accounts, so that for purposes of this Agreement such determinations shall be the same as would result from application of the Uniform System of Accounts.

13.12 The failure of any party to this Agreement to insist, in any one or more instances, upon strict performance of any of the provisions of this Agreement, or to take advantage of its rights hereunder, shall not be construed as a waiver of any such provisions, or the relinquishment of any such rights, but the same shall continue and remain in full force and effect.

13.13 This Agreement shall not be assigned by any party hereto, except to a successor to substantially all its assets, property and business, without the prior written consent of each of the other parties hereto; provided that any party hereto may assign its right, title and interest in and to and by virtue of this Agreement, including any and all extensions, renewals, amendments and supplements thereto, to a trustee or trustees, individual or corporate, as security for bonds or other obligations or securities, without such trustee or trustees being required to assume or become in any way obligated to perform any of the obligations of the assignor and, if any such trustee be a corporation, without such trustee being required by the parties hereto to qualify to do business in the State of Ohio, and such trustee or trustees may transfer, convey and assign all the right, title and interest of the assigning party in, to or by virtue of this Agreement in connection with any proceeding (whether or not judicial) to realize on any security provided for said bonds or other obligations or securities to any purchaser of any part of such security. No assignment by any party hereto to any other person or party of any of its rights or interests under this Agreement, except an assignment to a successor to substantially all the business and assets of such party, shall have the effect

of relieving such party from full liability and financial responsibility for performance (both before and after any such assignment) of all the obligations and duties herein provided and imposed upon such party, nor shall any such assignment by such party have the effect of waiving or releasing or in any manner altering or changing whatsoever the express restrictions or covenants of the use to be made of electric energy delivered as provided in this Agreement. Subject to the foregoing provisions of this section, this Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

13.14 This Agreement contains the entire agreement between the parties with respect to the matters provided for herein and it does not incorporate any term or condition of any other agreement except as expressly provided herein.

13.15 In the event of any act or omission by Buckeye which would give the Companies, or any of them, the right, immediately or after lapse of a period of time, to cancel or terminate this Agreement, the Company or Companies affected shall give written notice of such act or omission to the Trustees under the Buckeye Mortgage (and to Ohio if Ohio shall not be one of the Companies so affected) and shall not exercise such right against Buckeye if, within 60 days after the receipt of such notice by such Trustees, the corporate trustee under the Buckeye Mortgage shall undertake in a written notice to such Company or Companies that, from and after the date of such written notice to such Company or Companies said corporate trustee will be responsible for the performance of all of the obligations of Buckeye under this Agreement and, to the extent that any act or omission by Buckeye occurring prior to the date of the delivery by such Company or Companies of written notice thereof to said Trustees can be remedied, will remedy the same, and that said corporate trustee will promptly commence the performance of such obligations. If any act or omission by Buckeye occurring prior to the date of delivery by such Company or Companies of written notice thereof to the Trustees cannot be remedied, such Company or Companies shall look solely to Buckeye for redress in respect of such act or omission. In the event that, after receipt by any Company or Companies of a written notice from the corporate trustee under the Buckeye Mortgage that said corporate trustee will be responsible for the performance of all of the obligations of Buckeye under this Agreement, an act or omission by said corporate trustee occurs which would give any Company or Companies the right, immediately, or after lapse

of a period of time, to cancel or terminate this Agreement, such Company or Companies shall be entitled to exercise such right with the same consequences as if said corporate trustee had not substituted itself for Buckeye in the performance of Buckeye's obligations under this Agreement.

13.16 It is understood and agreed by the parties hereto that if any one or more provisions contained herein shall be finally determined by any court of competent jurisdiction to contravene, or be invalid under, any applicable provision of law, such contravention or invalidity shall not invalidate this Agreement, but this Agreement shall be construed as if not containing such provision or provisions and the rights and obligations of the parties shall be construed and enforced accordingly; provided, however, that no obligation other than those herein provided (except for changes in rates or charges) shall thereby be imposed on any party; and provided further that, to the extent that any such provision or provisions shall constitute a part of any effective rate schedule, or terms and conditions thereof, on file with any regulatory agency having jurisdiction, such provision or provisions shall remain in full force and effect (i) unless and until modified by valid final order of such regulatory agency or (ii) unless and until such provision or provisions in such rate schedule, or terms and conditions thereof, shall be finally determined by any court of competent jurisdiction to contravene, or be invalid under, any applicable provisions of law. In the event that an occasion shall arise requiring that this Agreement be construed as if not containing a particular provision or provisions as aforesaid and the effect thereof shall be to impose on any party an obligation other than those herein provided (except for changes in rates or charges), the parties will negotiate in good faith to provide a substitute for such provision or provisions.

13.17 This Agreement is made under and shall be governed by the laws of the State of Ohio.

13.18 This Agreement may be executed in one or more counterparts which shall together constitute one and the same instrument.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

BUCKEYE POWER, INC.

By OWEN D. MANNING  
*President*

OHIO POWER COMPANY

By G. V. PATTERSON  
*Vice President*



THE CINCINNATI GAS & ELECTRIC  
COMPANY

By WM. H. ZIMMER  
*President*

COLUMBUS AND SOUTHERN OHIO  
ELECTRIC COMPANY

By J. L. MCNEALEY  
*President*

THE DAYTON POWER AND LIGHT  
COMPANY

By J. M. STUART  
*President*

THE TOLEDO EDISON COMPANY

By JOHN K. DAVIS  
*President*

MONONGAHELA POWER COMPANY

By F. J. MCALARY  
*Vice President*

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APPENDIX A  
THE BUCKEYE MEMBERS

Name

ADAMS RURAL ELECTRIC COOPERATIVE, INC.  
BELMONT ELECTRIC COOPERATIVE, INC.  
BUCKEYE RURAL ELECTRIC COOPERATIVE, INC.  
BUTLER RURAL ELECTRIC COOPERATIVE, INC.  
CARROLL ELECTRIC COOPERATIVE, INC.  
DARKE RURAL ELECTRIC COOPERATIVE, INC.  
DELAWARE RURAL ELECTRIC COOPERATIVE, INC.  
FIRELANDS ELECTRIC COOPERATIVE, INC.  
FRONTIER POWER COMPANY  
GUERNSEY-MUSKINGUM ELECTRIC COOPERATIVE, INC.  
HANCOCK-WOOD ELECTRIC COOPERATIVE, INC.  
HOLMES-WAYNE ELECTRIC COOPERATIVE, INC.  
LICKING RURAL ELECTRIFICATION, INC.  
LOGAN COUNTY COOPERATIVE POWER & LIGHT ASS'N, INC.  
LORAIN-MEDINA RURAL ELECTRIC COOPERATIVE, INC.  
MARION RURAL ELECTRIC COOPERATIVE, INC.  
MIDWEST ELECTRIC, INC.  
MORROW ELECTRIC COOPERATIVE, INC.  
NORTH CENTRAL ELECTRIC COOPERATIVE, INC.  
NORTH WESTERN ELECTRIC COOPERATIVE, INC.  
PAULDING-PUTNAM ELECTRIC COOPERATIVE, INC.  
PIONEER RURAL ELECTRIC COOPERATIVE, INC.  
SOUTH CENTRAL POWER COMPANY  
SOUTHEASTERN MICHIGAN RURAL ELECTRIC COOPERATIVE, INC.  
TRICOUNTY RURAL ELECTRIC COOPERATIVE, INC.  
UNITED RURAL ELECTRIC  
WASHINGTON ELECTRIC COOPERATIVE, INC.

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APPENDIX B

WHOLESALE POWER AGREEMENT

AGREEMENT made as of the 15th day of September, 1966, between BUCKEYE POWER, INC. (hereinafter called the "Seller"), a corporation organized and existing under the laws of the State of Ohio, and (hereinafter called the "Purchaser"), a corporation organized and existing under the laws of the State of Ohio.

WHEREAS, the Seller has entered into an agreement in respect to the ownership and operation of an electric generating station and the provision for additional generating capacity dated as of , 1966, (hereinafter called the "Station Agreement"), with Ohio Power Company; and

WHEREAS, the Seller has entered into an agreement in respect to the transmission and delivery of electric power and energy dated as of , 1966 (hereinafter called the "Power Delivery Agreement") with Ohio Power Company, The Cincinnati Gas & Electric Company, Columbus and Southern Ohio Electric Company, The Dayton Power and Light Company, Monongahela Power Company, and The Toledo Edison Company (hereinafter collectively called the "Companies" and sometimes individually referred to as "Company"); and

WHEREAS, the Seller and the Purchaser have entered into a Wholesale Power Agreement dated as of September 3, 1963, but events occurring subsequent to the date thereof render it necessary and desirable to enter a revised agreement supplanting the September 3, 1963 agreement; and

WHEREAS, the Seller has heretofore entered or is about to enter into agreements for the sale of electric power and energy similar in form to this agreement with all of the purchasers who are members of the Seller; and may enter into similar contracts with other purchasers as authorized by the Board of Trustees of Seller; and

WHEREAS, it is understood that the aforementioned electric generating plant and such transmission facilities as may be necessary are to be constructed, and that such plant and facilities are not yet completed; and

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WHEREAS, it is further understood that Purchaser is presently obtaining energy from another supplier or suppliers and cannot purchase its requirements from the Seller until the existing contract or contracts with the other supplier or suppliers are cancelled or otherwise terminated; and

WHEREAS, the Purchaser desires to obtain from the Seller all of its requirements of electric power and energy on the terms and conditions herein set forth;

NOW THEREFORE, in consideration of the mutual undertakings herein contained, the parties hereto agree as follows:

1. *In General.* The Seller shall sell and deliver or cause to be delivered to the Purchaser and the Purchaser shall purchase and receive from the Seller all electric power and energy which the Purchaser shall require for the operation of the Purchaser's electric system and any additions thereto and extensions thereof to the extent that the Seller shall have such electric power and energy available together with facilities or arrangements for the delivery thereof; provided, however that the Purchaser shall have the right to continue to purchase electric power and energy under any existing contract or contracts with a supplier or suppliers other than the Seller during the remainder of the terms thereof unless such contract or contracts can be lawfully terminated sooner without penalty or forfeiture. The Purchaser shall terminate any existing contract or contracts with a supplier other than the Seller at such times as it may legally do so, provided that the Seller shall have sufficient electric power and energy available for the Purchaser together with facilities or arrangements for the delivery thereof. The Purchaser will not renew or extend any such existing contract or contracts or enter into any new contract unless the Seller is unable to supply Purchaser's electric power and energy requirements.

2. *Rates.*

(a) The Purchaser shall pay the Seller for all electric power and energy furnished hereunder at the rates and on the terms and conditions which shall initially be determined as hereinafter provided in this subparagraph (a). The Seller shall, prior to the effective date of this Agreement, determine initially the rates at which, and the terms and conditions under which, Purchaser shall pay Seller for all power and energy furnished hereunder.

which (i) will be constructed to reflect a proper division of costs between the demand charge and the energy charge and appropriate adjustments as required to compensate for changes in the cost of fuel, and other appropriate cost factors, and (ii) shall be set forth in a schedule furnished by Seller to Purchaser and shall thereupon become a part of this Agreement to the same extent as if physically attached as a supplement hereto at the date of the execution and delivery of this Agreement.

(b) The Board of Trustees of the Seller at such intervals as it shall deem appropriate, but in any event not less frequently than once in each calendar year, shall review the rate for electric power and energy furnished hereunder and under similar agreements with other purchasers and, if necessary, shall revise such rate so that it shall produce revenues which shall be sufficient, but only sufficient, together with the revenues and income of the Seller from all other sources, to meet the cost of the operation and maintenance (including but not limited to, replacements, insurance, taxes and administrative and general overhead expenses) of the generating plant, transmission system and related facilities of the Seller; the cost of any electric power and energy purchased for resale hereunder by the Seller; the cost of transmission, delivery or other services provided or arranged for by the Seller; payments on account of principal and interest of all indebtedness of the Seller; and provide for the establishment and maintenance of reasonable reserves, including reserves for outstanding or anticipated indebtedness, and such other expenses as the Board of Trustees of the Seller may authorize. The Seller shall cause a notice in writing to be given to the Purchaser and other purchasers from the Seller which shall set out all the proposed revisions of the rate with the effective date thereof, which shall be not less than thirty (30) nor more than sixty (60) days after the date of the notice, and shall set forth the basis upon which the rate is proposed to be adjusted and established. The Purchaser agrees that the rate from time to time established by the Board of Trustees of the Seller shall be deemed to be substituted for the rate herein provided and agrees to pay for electric power and energy furnished by the Seller to it hereunder after the effective date of any such revision, at such revised rates.

### 3. *Electric Characteristics and Points of Delivery.*

(a) The electric power and energy to be furnished hereunder shall be what is known commercially as three-phase 60 cycle, alternating

current. As far as is practical Purchaser will balance its load requirements on each of the three phases at each point of delivery hereunder. The Purchaser shall maintain at the time of the monthly peak kilowatt demand at each of its points of delivery hereunder where the delivery voltage is 22 KV or more a reactive power demand that is equal to or smaller than 41% of the monthly peak kilowatt demand at each such point of delivery, representing a power factor of not less than 92.5%, and at each of its points of delivery hereunder where the delivery voltage is less than 22 KV a reactive power demand that is equal to or smaller than 33% of the monthly peak kilowatt demand at each such point of delivery, representing a power factor not less than 95%. If the Purchaser fails to maintain such power factor limits and the Seller notifies the Purchaser that corrective action is necessary, the Purchaser shall take the necessary corrective action.

(b) The Purchaser shall keep the Seller advised annually concerning anticipated loads at established points of delivery and shall keep the Seller advised concerning the need for additional points of delivery for periods up to ten years in advance. The initial point or points of delivery and their initial delivery voltages shall be as set forth in Schedule B, attached hereto and made a part hereof. Other points of delivery may be established by mutual agreement of the Purchaser and the Seller.

(c) The Seller may require changes in delivery voltages and that provision be made for future changes in delivery voltages in accordance with policies and procedures established by the Board of Trustees of the Seller. Responsibility for the cost of modifying the Purchaser's facilities to provide for such changes shall be determined in accordance with policies and procedures established by the Board of Trustees of the Seller.

(d) The Seller shall make and pay for, or cause to be made and paid for, all final connections to the facilities of the Purchaser at the point or points of delivery hereunder.

4. *Metering Equipment.* Seller shall furnish, maintain and read or cause to be furnished, maintained and read metering equipment used to determine the demand and the energy supplied to the Purchaser at a point of delivery. The location of metering equipment installed for the purpose of measuring demand and energy delivered to the Purchaser shall be determined by the Seller, and if such location is on the property of the Purchaser,

the Purchaser shall provide the necessary mounting space and supports for such equipment. When such metering equipment is located at a place other than the point of delivery proper compensation shall be made to accurately reflect the demand and energy figures at the point of delivery.

5. *Meter Readings and Payment of Bills.* The Seller shall read meters, or cause such meters to be read, monthly. Electric power and energy furnished hereunder shall be paid for at the office of the Seller at 4302 Indianola Avenue, Columbus 14, Ohio, monthly, within ten (10) days after the bill therefor is mailed to the Purchaser. If the Purchaser fails to pay any bill within ten (10) days after the date of mailing, an additional charge of two per cent (2%) of the amount of such bill will be made. Interest shall accrue on the amount of any unpaid bill at the rate of six per cent (6%) per annum commencing to run thirty (30) days after delinquency.

6. *Meter Testing and Billing Adjustment.* Metering equipment used in determining the demand and amount of electric energy supplied hereunder shall be tested and calibrated by the Seller, or caused to be tested and calibrated by the Seller, by comparison with accurate standards at intervals of not to exceed twelve (12) months. If any metering equipment shall be found inaccurate, it shall be restored to the extent possible to a 100.0% accurate condition or new metering equipment to the extent necessary shall be substituted so that, as far as possible, 100.0% accuracy shall always be maintained. The Purchaser shall have the right to request that a special meter test be made at any time. In the event a test made at the Purchaser's request discloses that the meter tested is registering correctly or within one per cent (1%) of 100.0% accuracy at full load, Purchaser shall bear the expense of such meter test.

The results of all such tests and calibrations shall be open to examination by the Purchaser and a report of every requested test shall be furnished to the Purchaser. Any meter tested and found to be not more than one per cent (1%) above or below 100.0% accuracy at full load shall be considered to be accurate insofar as correction of billing is concerned. If, as a result of any test, any meter is found to register in excess of one per cent (1%) either above or below 100.0% accuracy at full load, then the readings of such meter previously taken for billing purposes shall be corrected according to the percentage of inaccuracy so found, but no such correction shall

extend beyond the last regular monthly billing period occurring prior to the day on which inaccuracy is discovered by such test, and no correction shall be made for a longer period than that during which it may be determined by mutual agreement of the parties involved that the inaccuracy existed.

For any period that metering equipment is found to have failed wholly or in part to register and for which no alternate metering is available, it shall be assumed that the demand established, or electric energy delivered, as the case may be, during said period is the same as that for a period of like operation during which such meter was in service and operating.

7. *Notice of Meter Test.* The Seller shall notify the Purchaser in advance of the time of any meter test so that a representative of the Purchaser may be present.

8. *Substations.*

(a) The Purchaser shall construct, own, and maintain the necessary substation structures and equipment at or beyond a point of delivery except as may otherwise be mutually agreed between the Purchaser and the Seller. The substation structures and equipment shall include such control switching and protective equipment as is required by the practices which the Seller shall establish.

(b) Any substation structures for a new substation required by the Purchaser which is to be supplied from a new or existing point of delivery shall be designed, constructed, insulated and equipped for operation at a delivery voltage of 69 KV except as may otherwise be agreed between the Purchaser and the Seller.

9. *Right of Access.* Persons authorized by either party hereto shall be permitted to enter the premises of the other party at all reasonable times in order to carry out the provisions hereof.

10. *Continuity of Service.* The Seller shall use reasonable diligence to provide a constant and uninterrupted supply of electric power and energy hereunder. If the supply of electric power and energy shall fail or be interrupted or be delayed or become defective through an act of God, or nature, or of the common enemy or because of accident, labor dispute, necessary maintenance, fire, flood, or any other cause beyond the control of the Seller,



the Seller shall not be liable therefor or for damages caused thereby; provided, however, that failure of the Purchaser to receive electric power and energy because of any of the aforesaid conditions shall not relieve the Purchaser of its obligation to make payments to the Seller as provided herein.

11. *Liability.* Each party to this Agreement shall individually bear such liability as may exist under law for any damage, injury, or death proximately caused by any person or property under its control and dominion without contribution or indemnity from the other. Neither party shall be responsible for the consequences of the negligence or fault of the other.

12. *Interconnection of Delivery Points.*

(a) The parties recognize that, in the event any electrical connection is made within the system of the Purchaser which electrically connects a particular point of delivery with another point of delivery when both such points of delivery are energized by the Seller or that electrically connects a particular point of delivery through any point of interconnection with any other energized system, certain hazards to the property and employees of the parties concerned may be created. Such electrical connection of delivery points may also create problems in respect of load dispatching and accounting. Accordingly, the Purchaser shall operate its system facilities at all times so that no point of delivery will be electrically connected with any other point of delivery or with any other energized system as the result of any electrical connection made within or between any parts of such system; provided, however, that certain connections of this kind between points of delivery may be made in accordance with mutually satisfactory terms and conditions previously set forth in writing; and provided further that in the event of an emergency due to an outage of a part of the system of the Purchaser to which service cannot be restored within a reasonably short time through the point of delivery from which such part is normally served, the Purchaser may at its sole risk perform electrical switching within its system which will electrically connect all or any section or sections of such part with some other part of its system which is being supplied by the same Company through another point of delivery without first notifying such Company, if the part being transferred has first been disconnected from any source of supply and is not reconnected to its normal point of delivery until it is again disconnected from all sources of supply. The Purchaser shall give immediate notice to the Company or

Companies concerned that such emergency switching is being performed. Nothing contained herein shall be construed to prohibit the Purchaser from switching any part of its system from the normal source of supply to an alternate source of supply within such system for the purpose of isolating parts of its system for making repairs and/or maintenance thereto; provided, that such switching does not electrically connect a particular point of delivery with another point of delivery.

(b) The Purchaser agrees to protect, indemnify and save harmless the Seller from and against all cost, damage or expense resulting from and all loss of or damage to the property of the Seller or the Companies, and from any and all liability for loss of life or property or damage to the person or property of the Purchaser or of any third person, firm or corporation (including the officers, agents and employees of either party hereto) and from and against any and all claims, demands or actions for such loss, injury or damage (including all costs of any legal proceedings) directly or indirectly resulting from or arising out of failure of the Purchaser to abide by the provisions of this Paragraph 12, except when occasioned by the negligence of the Seller or a Company.

13. *Term.* This Agreement shall become effective only upon approval in writing by the Administrator of the Rural Electrification Administration, U. S. Department of Agriculture, Washington, D. C. This Agreement shall remain in effect for a term of thirty-five (35) years from the date of acquisition by Seller of its first generating unit provided for in the Station Agreement, or as extended in accordance with Paragraph 14 hereof and thereafter until terminated by either party's giving the other not less than three (3) years' written notice of its intention to terminate. The delivery of power and energy under this Agreement shall commence upon completion of the facilities and arrangements necessary for Seller to provide service hereunder. It is understood that the Seller's obligation to provide service and the Purchaser's obligation to receive service and to pay therefor shall be subject to the provisions of Paragraph 1 hereof. It is agreed that this Agreement may not be amended or modified without approval in writing by the said Administrator of the Rural Electrification Administration.

14. *Additional Generating Unit.* The Seller has the right to build an additional generating unit or half-unit if in its determination the construction

of an additional unit or half-unit is economically feasible and such action is approved by not less than a majority of the Class A members of Seller. If a decision is made to build another generating unit or half-unit as aforesaid this Agreement shall be extended automatically for an additional period of time equal to the financing period of the additional unit or units.

15. *Arbitration.* Any controversy or claim arising out of or relating to this Agreement shall be settled through arbitration by three (3) arbitrators. One arbitrator shall be appointed by each of the parties to this Agreement and the third arbitrator shall be appointed by the two arbitrators chosen by the parties. The arbitration shall be conducted in accordance with the Rules of the American Arbitration Association. In the event any claim or controversy arises relating to or involving the delivery of power and energy to the Purchaser, and such claim or controversy is submitted to arbitration pursuant to Seller's arrangements with a Company or Companies, Purchaser hereby authorizes the Seller to act as its sole representative in such arbitration and agrees to do such things and perform such acts as may be required by the arbitration award.

16. *Assignment.*

(a) Neither party hereto shall assign this Agreement without the consent of the other; provided, however, that the Seller may assign its right, title and interest in and to and by virtue of this Agreement, including any and all extensions, renewals, amendments and supplements thereto, to a trustee or trustees, individual or corporate, as security for bonds or other obligations or securities, without such trustee or trustees being required to assume or become in any way obligated to perform any of the obligations of the Seller hereunder and, if any such trustee be a corporation, without such trustee being required to qualify to do business in the State of Ohio; and provided further that no assignment of this Agreement in whole or in part shall relieve the Purchaser from its obligations hereunder or under any supplement hereto, which obligations shall survive (i) any such assignment, and/or (ii) any termination of Purchaser's membership in Seller.

(b) In the event that the United States of America (acting through the Administrator of the Rural Electrification Administration), upon lawful exercise of powers conferred upon it by or under the Rural Electrification Act of 1936, as amended, shall, as a result of foreclosure proceedings brought

by it against the Purchaser, cause substantially all the assets, property and business of the Purchaser to be sold, Seller hereby consents to the assignment of this Agreement to the purchaser at such sale of substantially all of such assets, property and business but only if such purchaser shall be any one of the following: (a) any one of the thirty electric companies organized and operated not for profit on a cooperative basis which are operating in the State of Ohio at the date of this Agreement and which together constitute the present membership of Seller, (b) any electric company similarly organized and operated which may hereafter be or become a member of Seller, (c) any successor to any existing member of Seller or members of Seller except (i) a successor which is at the date of this Agreement a public utility included as such under the definition of that term contained in Section 4905.02 of the Revised Code of Ohio or which is a successor to any such public utility, or (ii) Seller or a successor to Seller, or (iii) a successor which is a political subdivision of the State of Ohio or a municipal corporation, bureau or department organized by or serving any such political subdivision or any other governmental agency or successor to the foregoing, or (d) the United States of America or any transferee of the United States of America meeting the requirements of clause (a), (b) or (c) of this sentence; provided, however, that the United States of America shall become an assignee only to the extent required to permit operation by it of the assets, property and business acquired from the Purchaser for such period, up to but not exceeding five years after its acquisition of such assets, property and business, as it shall continue to operate the same pending liquidation or other disposition.

17. *Consumption Within Ohio.* The Purchaser shall so conduct its operations that the electric power and energy delivered to the Seller under the provisions of the Power Delivery Agreement and subsequently delivered by Seller to the Purchaser at any point of delivery established hereunder shall be consumed wholly within the State of Ohio.

18. *Dispositions of Properties which Reduce Requirements.* The Purchaser agrees not to sell, transfer, or otherwise dispose of any portion of its properties, business, or other assets which will reduce its requirements for electric power and energy except on terms approved by the Seller. The provisions of this Paragraph shall not apply to an exchange of properties located within the State of Ohio where such exchange is intended to avoid the unnecessary duplication of facilities and does not substantially reduce the Purchaser's requirements for electric power and energy.

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19. *Termination of the Wholesale Power Agreement Dated as of September 3, 1963.* The Wholesale Power Agreement dated as of September 3, 1963, which was previously entered into by the Purchaser and the Seller shall terminate and be of no further force and effect as of the date when this Agreement shall have been executed and become effective.

DATED as of the 15th day of September, 1966.

BUCKEYE POWER, INC.,      SELLER

By.....  
President

ATTEST:

.....  
Secretary

.....  
PURCHASER

By.....  
President

ATTEST:

.....  
Secretary

SUPPLEMENTAL AGREEMENT

AGREEMENT made as of June 1, 1967, between BUCKEYE POWER, INC. (hereinafter called "Seller") and (hereinafter called "Purchaser").

WHEREAS, the Seller and the Purchaser have entered into a Wholesale Power Agreement made as of the 15th day of September, 1966 (which together with all supplements thereto is hereinafter called the "Power Agreement") and said agreement has been conditionally approved by the Administrator of the Rural Electrification Administration; and

WHEREAS, the Seller has obtained commitments for the purchase of its bonds in a principal amount of up to \$62,000,000 to be issued pursuant to the terms and conditions of an Indenture of Mortgage and Deed of Trust to Chemical Bank New York Trust Company and The Ohio National Bank of Columbus (hereinafter called the "Buckeye Mortgage");

Now, THEREFORE, in consideration of the premises and the mutual undertakings herein contained, the parties hereto agree as follows:

1. In the event of any act or omission by Seller which would give Purchaser the right, immediately or after lapse of a period of time, to cancel or terminate the Power Agreement, Purchaser shall give written notice of such act or omission to the Trustees under the Buckeye Mortgage and shall not exercise such right against Seller if, within 60 days after the receipt of such notice by such Trustees, the corporate trustee under the Buckeye Mortgage shall undertake in a written notice to Purchaser that, from and after the date of such written notice to Purchaser said corporate trustee shall be responsible for the performance of all of the obligations of Seller under the Power Agreement and, to the extent that any act or omission by Seller occurring prior to the date of delivery by Purchaser of written notice thereof to said Trustees can be remedied, will remedy the same, and that said corporate trustee will promptly commence the performance of such obligations. If any act or omission by Seller occurring prior to the date of delivery by Purchaser of written notice thereof to the Trustees cannot be remedied, Purchaser shall look solely to Seller for redress in respect of such

act or omission. In the event that, after receipt by Purchaser of a written notice from the corporate trustee under the Buckeye Mortgage that said corporate trustee will be responsible for the performance of all of the obligations of Seller under the Power Agreement, an act or omission by said corporate trustee occurs which would give Purchaser the right, immediately, or after lapse of a period of time, to cancel or terminate the Power Agreement, Purchaser shall be entitled to exercise such right with the same consequences as if said corporate trustee had not substituted itself for Seller in the performance of Seller's obligations under the Power Agreement.

2. It is understood and agreed by the parties hereto that if any one or more provisions contained in the Power Agreement shall be finally determined by any court of competent jurisdiction to contravene, or be invalid under, any applicable provision of law, such contravention or invalidity shall not invalidate the Power Agreement, but the Power Agreement shall be construed as if not containing such provision or provisions and the rights and obligations of the parties shall be construed and enforced accordingly; provided, however, that no obligation other than those herein provided (except for changes in rates or charges) shall thereby be imposed on either party hereto; and provided further that, to the extent that any such provision or provisions shall constitute a part of any effective rate schedule, or terms and conditions thereof, on file with any regulatory agency having jurisdiction, such provision or provisions shall remain in full force and effect (i) unless and until modified by valid final order of such regulatory agency or (ii) unless and until such provision or provisions in such rate schedule, or terms and conditions thereof, shall be finally determined by any court of competent jurisdiction to contravene, or be invalid under, any applicable provisions of law. In the event that an occasion shall arise requiring that the Power Agreement be construed as if not containing a particular provision or provisions as aforesaid and the effect thereof shall be to impose on either party hereto an obligation other than those herein provided (except for changes in rates or charges), the parties will negotiate in good faith to provide a substitute for such provision or provisions.

3. If the Power Agreement is assigned to the trustee or trustees under the Buckeye Mortgage as security for bonds or other obligations or securities

secured by the Buckeye Mortgage in accordance with paragraph 16(a) of the Power Agreement, such trustee or trustees may transfer, convey and assign all the right, title and interest of the assigning party in, to or by virtue of the Power Agreement in connection with any proceedings (whether or not judicial) to realize on any security provided for said bonds or other obligations or securities to any purchaser of any part of such security; provided, however, that in such event the rights and obligations of the parties to the Power Agreement shall be subject to the following terms and conditions, notwithstanding any other provision thereof:

(a) Purchaser shall have the same rights with respect to the establishment of additional Delivery Points to serve Purchaser's requirements for electric power and energy as are conferred upon Seller by Section 4.3(c) and (e) of ARTICLE FOUR of the Power Delivery Agreement dated as of June 1, 1967 and all supplements thereto; provided, however, that Purchaser shall have a right to such an additional Delivery Point only if Purchaser fulfills all requirements and obligations with respect to such additional Delivery Point (including the obligations for costs associated therewith) as are imposed upon Seller and/or a Buckeye Member under ARTICLE FOUR of said Power Delivery Agreement. Purchaser shall have the same rights and obligations with respect to (i) changes in delivery voltages, (ii) provision for future changes in delivery voltages, and (iii) provision for control switching and protective equipment, as are conferred or imposed upon Seller and/or a Buckeye Member by ARTICLE FOUR of the Power Delivery Agreement dated as of June 1, 1967 and all supplements thereto. In no event shall the Seller's obligations to Purchaser under this paragraph 3(a) be greater than the obligations imposed upon the Companies under the aforesaid ARTICLE FOUR of the Power Delivery Agreement dated as of June 1, 1967 and all supplements thereto.

(b) The right of Seller to automatically extend the term of the Power Agreement in accordance with paragraph 14 thereof shall terminate; and

(c) Any revision in the then existing rate schedule of Seller issued pursuant to the provisions of paragraph 2(b) of the Power Agreement shall become effective only if (i) such revision has been expressly approved in a final order of any regulatory agency having jurisdiction thereof, or (ii) in the



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event that no regulatory agency has jurisdiction thereof, such revision is just, reasonable and not unduly discriminatory or preferential.

EXECUTED as of the day and year first above written.

BUCKEYE POWER, INC.

Seller

By .....  
President

Attest:

.....  
Secretary

.....  
Purchaser

By .....  
President

Attest:

.....  
Secretary

SECOND SUPPLEMENTAL AGREEMENT

AGREEMENT made as of January 1, 1968, between BUCKEYE POWER, INC., (herein called "Seller") and  
(herein called "Purchaser").

WHEREAS, the Seller and the Purchaser have entered into a Wholesale Power Agreement made as of the 15th day of September, 1966 (herein called "Wholesale Power Agreement") and a Supplemental Agreement made as of June 1, 1967 (herein called "Supplemental Agreement") and certain references contained therein are now inaccurate;

Now, THEREFORE, in consideration of the premises and the mutual undertakings herein contained, the parties hereto agree as follows:

1. The references to the Power Delivery Agreement dated as of June 1, 1967, which are contained in the Supplemental Agreement shall be deemed to refer to the Power Delivery Agreement dated as of January 1, 1968 and all supplements thereto.

2. The Chemical Bank New York Trust Company shall be deleted as a named trustee from the reference to the Buckeye Mortgage contained in the recitals to the Supplemental Agreement.

3. The references to the Power Delivery Agreement and to the Station Agreement which are contained in the Wholesale Power Agreement shall be deemed to refer to the Power Delivery Agreement dated as of January 1, 1968 and to the Station Agreement dated as of January 1, 1968, respectively.

EXECUTED as of the day and year first above written.

BUCKEYE POWER, INC.

Seller

By.....  
President

Attest:

.....  
Secretary

.....  
Purchaser

By.....  
President

Attest:

.....  
Secretary

## APPENDIX C

### METHOD FOR REDETERMINATION OF ANNUAL TRANSMISSION CHARGE RATE AND ANNUAL DELIVERY CHARGE RATE

Each redetermination of the Annual Transmission Charge Rate per Kw and the Annual Delivery Charge Rate per Kw made as provided in Sections 3.6 and 8.3 of this Agreement shall be made by the following method:

(a) Determine for each of the preceding five calendar years the year-end gross dollar amount of transmission plant investment applicable to the transmission plant of Ohio located within the State of Ohio, other than transmission plant specifically provided and exclusively utilized by Ohio to deliver any load commitment delivered directly from a generating plant bus, which is included in the total transmission plant investment recorded in Ohio's Annual Report to The Public Utilities Commission of Ohio (in the form prescribed by the Public Utilities Commission of Ohio for the calendar year 1963) as "Total transmission plant" on line 54 of column (g) under the title "Electric Plant in Service" on page 402 of said Annual Report.

(b) Determine for each of the preceding five calendar years the annual peak kilowatt demand imposed on Ohio's transmission system by adding for each clock-hour of each such year the sum of (i) the net amount of power received or delivered for any hour by Ohio at the Ohio State line or within the State of Ohio (A) through connections or interconnections with systems other than those of Buckeye or any Buckeye Member, (B) through facilities of Ohio which extend from another State into the State of Ohio, and (C) from generating units located within the State of Ohio, (ii) plus the amount of power scheduled or contracted for firm delivery for such hour by Ohio to systems other than those of Buckeye or any Buckeye Member, including power scheduled for delivery in such hour as the Ohio Edison Transfer Points Hourly Demand and the Transfer Points Hourly Demands of the Companies other than Ohio, and (iii) plus the amount of power scheduled or contracted for delivery into the system of Ohio for such hour under

(g) The adjusted amount of the Annual Delivery Charge Rate per Kw shall be an amount rounded to the nearest even five cents which is obtained by multiplying the adjusted total charge rate obtained pursuant to (f) above by 0.55 or by such other multiplier as may be established by mutual agreement among the several Companies; provided, however, that the multiplier specified above shall remain in effect through the end of the sixth full calendar year following the first year in which all or any part of the Buckeye Power Requirement is made available to Buckeye in accordance with the terms and provisions of this Agreement.

(h) The adjusted amount of the Annual Transmission Charge Rate per Kw shall be the amount obtained by subtracting the adjusted amount of the Annual Delivery Charge Rate per Kw obtained pursuant to (g) above from the amount of the adjusted total charge obtained pursuant to (f) above.

wheeling contracts with others than Buckeye or any Buckeye Member providing for the delivery by Ohio of power for others, by then deducting from the sum so obtained the amount of power delivered for such hour to facilities specifically provided and exclusively utilized to deliver any load commitment delivered directly from a generating plant bus (except to the extent that such load is supplied from a generating unit or units not owned by Ohio), and by then selecting the largest amount so obtained for any clock hour in each such year.

(c) Determine the investment in transmission plant, expressed in dollars per kilowatt of annual peak demand on Ohio's transmission system, for each of the preceding five calendar years by dividing the dollar amount of each year's transmission plant investment determined pursuant to (a) above by each corresponding year's annual peak kilowatt demand on Ohio's transmission system determined pursuant to (b) above.

(d) Determine the average investment in transmission plant, expressed in dollars per kilowatt, for the preceding five calendar years by adding the transmission plant investments determined pursuant to (c) above and dividing the sum so obtained by five (5).

(e) The average investment in transmission plant determined pursuant to (d) above for the first five full calendar years following the year in which all or any part of the Buckeye Power Requirement is first made available to Buckeye in accordance with the terms and provisions of this Agreement shall be the base investment used for computing all future adjustments hereunder.

(f) Beginning at the end of the sixth full calendar year following the first year in which all or any part of the Buckeye Power Requirement is made available to Buckeye in accordance with the terms and provisions of this Agreement, and at the end of each calendar year thereafter, the average investment in transmission plant determined pursuant to (d) above shall be compared with the base investment established pursuant to (e) above and for each full dollar change of such average investment in transmission plant above or below the base investment the total charge of \$10.25 for the Transmission Service and the Delivery Service rendered pursuant to this Agreement shall be increased or decreased, as the case may be, by \$0.14.

(g) The adjusted amount of the Annual Delivery Charge Rate per Kw shall be an amount rounded to the nearest even five cents which is obtained by multiplying the adjusted total charge rate obtained pursuant to (f) above by 0.55 or by such other multiplier as may be established by mutual agreement among the several Companies; provided, however, that the multiplier specified above shall remain in effect through the end of the sixth full calendar year following the first year in which all or any part of the Buckeye Power Requirement is made available to Buckeye in accordance with the terms and provisions of this Agreement.

(h) The adjusted amount of the Annual Transmission Charge Rate per Kw shall be the amount obtained by subtracting the adjusted amount of the Annual Delivery Charge Rate per Kw obtained pursuant to (g) above from the amount of the adjusted total charge obtained pursuant to (f) above.

# APPENDIX D

## INITIAL DELIVERY POINTS

<u>Buckeye Member and Delivery Points</u>	<u>Delivering Company</u>	<u>Map Sheet</u>	<u>County</u>	<u>Delivery KV</u>
ADAMS RURAL ELECTRIC COOPERATIVE, INC.				
Lawshe (94-1).....	CSO	6	Adams	69
Pan Handle (94-2).....	CSO	6	Adams	69
Tick Ridge (94-3).....	CSO	6	Scioto	12.5
BELMONT ELECTRIC COOPERATIVE, INC.				
Stacy (32-T1).....	OPC	11	Harrison	69
Shepherdstown (32-2).....	OPC	11	Belmont	69
Lamira (32-3).....	OPC	11	Belmont	69
Batesville (32-T4).....	OPC	11	Noble	69
Powhatan Point (32-T5).....	OPC	11	Belmont	69
Pipecreek (32-9).....	OPC	11	Belmont	69
BUCKEYE RURAL ELECTRIC COOPERATIVE, INC.				
Beaver (88-1).....	OPC	6	Pike	34.5
Echo Valley (88-2).....	CSO	9	Jackson	69
Rutland (88-T3).....	OPC	9	Meigs	34.5
South Webster (88-T4).....	OPC	9	Scioto	34.5
Scottown (88-T5).....	OPC	9	Lawrence	34.5
Sunrise (88-6).....	OPC	9	Lawrence	34.5
Patriot (88-7).....	OPC	9	Gallia	138
Meigs (88-8).....	OPC	9	Meigs	138
BUTLER RURAL ELECTRIC COOPERATIVE, INC.				
Milford (74-1).....	CGE	2	Butler	69
Jacksonburg (74-2).....	CGE	2	Butler	69
Oxford (74-3).....	CGE	2	Butler	69
Layhigh (74-4).....	CGE	3	Butler	69
Tolbert (74-5).....	CGE	2	Butler	69
Ross (74-6).....	CGE	3	Butler	69
CARROLL ELECTRIC COOPERATIVE, INC.				
Malvern (84-1).....	OPC	10	Carroll	23
Summitville (84-2).....	OPC	10	Columbiana	23
Ross (84-3).....	OPC	11	Jefferson	69
Amsterdam (84-4).....	OPC	11	Jefferson	69
Merrick (84-5).....	OPC	11	Tuscarawas	69
Petersburg (84-6).....	OPC	10	Carroll	69
Atwood (84-7).....	OPC	10	Carroll	
Ross (84-9).....	OPC	10	Jefferson	

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<u>Buckeye Member and Delivery Points</u>	<u>Delivering Company</u>	<u>Map Sheet</u>	<u>County</u>	<u>Delivery KV</u>
DARKE RURAL ELECTRIC COOPERATIVE, INC.				
Rosburg (42-1) .....	DPL	2	Darke	12.5
Baker (42-2).....	DPL	2	Darke	12.5
Castine (42-3) .....	DPL	2	Darke	12.5
Monroe (42-4).....	DPL	2	Preble	12.5
FRONTIER POWER COMPANY				
Stone Creek (55-1).....	OPC	11	Tuscarawas	34.5
Bakersville (55-2).....	OPC	11	Coshocton	34.5
Coshocton (55-T3) .....	OPC	8	Coshocton	34.5
Tunnel Hill (55-4).....	OPC	8	Coshocton	34.5
West Lafayette (55-5) .....	OPC	8	Coshocton	34.5
Auburn (55-T7) .....	OPC	11	Tuscarawas	34.5
GUERNSEY-MUSKINGUM ELECTRIC COOPERATIVE, INC.				
Newcomerstown (86-1) .....	OPC	11	Tuscarawas	34.5
Cambridge (86-2).....	OPC	11	Guernsey	34.5
Route 40 (86-3).....	OPC	11	Guernsey	34.5
Senecaville (86-4).....	OPC	11	Guernsey	34.5
Cumberland (86-5).....	OPC	11	Guernsey	34.5
Crooksville (86-6).....	OPC	8	Muskingum	23
Mt. Sterling (86-7).....	OPC	8	Muskingum	69
Dresden (86-8).....	OPC	8	Muskingum	69
Antrim (86-9).....	OPC	11	Guernsey	34.5
HANCOCK-WOOD ELECTRIC COOPERATIVE, INC.				
Arlington (87-1).....	OPC	4	Hancock	23
East Findlay (87-2) .....	OPC	4	Hancock	34.5
West Findlay (87-3).....	OPC	4	Hancock	34.5
Shawtown (87-4).....	OPC	1	Hancock	34.5
Hatton (87-5) .....	OPC	4	Wood	69
Portage (87-6).....	OPC	4	Wood	34.5
Van Buren (87-7).....	OPC	4	Hancock	34.5
Cory (87-17).....	OPC	1	Hancock	34.5
Fostoria (87-14).....	OPC	4	Hancock	69
Blanchard (87-19).....	OPC	4	Hancock	69
HOLMES-WAYNE ELECTRIC COOPERATIVE, INC.				
Killbuck (31-1) .....	OPC	8	Holmes	34.5
Ripley (31-2).....	OPC	7	Holmes	69



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<u>Backeye Member and Delivery Points</u>	<u>Delivering Company</u>	<u>Map Sheet</u>	<u>County</u>	<u>Delivery KV</u>
Alpine (31-3) .....	OPC	10	Holmes	69
Moreland (31-4) .....	OPC	7	Wayne	69
Hefferline (31-5) .....	OPC	7	Wayne	23
N. Wayne (31-6) .....	OPC	7	Wayne	23
Clear Creek (31-8) .....	OPC	7	Wayne	23
Sugar Creek (31-12) .....	OPC	8	Holmes	34.5
LICKING RURAL ELECTRIFICATION, INC.				
N. Liberty (41-T1) .....	OPC	7	Knox	69
Mt. Vernon (41-2) .....	OPC	8	Knox	69
Hunt (41-T3) .....	OPC	8	Knox	69
Highwater (41-T4) .....	OPC	8	Licking	69
Rolling Meadow (41-6) .....	CSO	8	Licking	40
Jacksontown (41-7) .....	OPC	8	Licking	69
Palmyra (41-11) .....	OPC	7	Richland	69
LOGAN COUNTY COOPERATIVE POWER & LIGHT ASS'N, INC.				
Huntsville (71-1) .....	DPL	2	Logan	12.5
Lewistown (71-2) .....	DPL	2	Logan	12.5
Horton (71-4) .....	DPL	5	Logan	12.5
West Liberty (71-5) .....	DPL	5	Logan	12.5
East Liberty (71-3) .....	DPL	5	Logan	12.5
MIDWEST ELECTRIC, INC.				
Beaverdam (33-1) .....	OPC	1	Allen	12.5
Moulton (33-2) .....	OPC	2	Auglaize	12.5
Spencerville (33-3) .....	OPC	1	Allen	12.5
Elida (33-4) .....	OPC	1	Allen	12.5
Coldwater (33-5) .....	DPL	2	Mercer	12.5
St. Henry (33-6) .....	DPL	2	Mercer	12.5
Rockford (33-7) .....	DPL	1	Mercer	12.5
Sharpsburg (33-8) .....	DPL	2	Mercer	12.5
Kossuth (33-9) .....	OPC	1	Auglaize	12.5
Chickasaw (33-10) .....	DPL	2	Mercer	12.5
Jonestown (33-11) .....	OPC	1	Van Wert	12.5
Bluelick (33-12) .....	OPC	1	Allen	34.5
Macedon (33-13) .....	DPL	2	Mercer	12.5

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<u>Buckeye Member and Delivery Points</u>	<u>Delivering Company</u>	<u>Map Sheet</u>	<u>County</u>	<u>Delivery KV</u>
NORTH CENTRAL ELECTRIC COOPERATIVE, INC.				
Jackson (60-1) .....	OPC	4	Seneca	69
Republic (60-2) .....	OPC	4	Seneca	69
Seneca (60-3) .....	OPC	4	Seneca	69
St. Stephens (60-4) .....	OPC	4	Seneca	69
New Washington (60-5) .....	OPC	4	Crawford	69
Carey (60-6) .....	OPC	4	Wyandot	69
Nevada (60-7) .....	OPC	4	Wyandot	69
Sycamore (60-8) .....	OPC	4	Wyandot	69
NORTH WESTERN ELECTRIC COOPERATIVE, INC.				
Mark Center (75-T5) .....	OPC	1	Defiance	34.5
PAULDING-PUTNAM ELECTRIC COOPERATIVE, INC.				
Cecil (39-1) .....	OPC	1	Paulding	69
Latty (39-2) .....	OPC	1	Paulding	34.5
Continental (39-3) .....	OPC	1	Putnam	34.5
Kalida (39-4) .....	OPC	1	Putnam	34.5
Ottoville (39-5) .....	OPC	1	Putnam	34.5
Van Wert (39-6) .....	OPC	1	Van Wert	69
Convoy (39-9) .....	OPC	1	Van Wert	69
Columbus Grove (39-10) .....	OPC	1	Putnam	34.5
Fort Brown (39-11) .....	OPC	1	Paulding	34.5
Müller City (39-12) .....	OPC	1	Putnam	34.5
PIONEER RURAL ELECTRIC COOPERATIVE, INC.				
Botkins (1-1) .....	DPL	2	Shelby	12.5
Newport (1-3) .....	DPL	2	Shelby	12.5
Hardin (1-4) .....	DPL	2	Shelby	12.5
Houston (1-6) .....	DPL	2	Shelby	12.5
McCartyville (1-8) .....	DPL	2	Shelby	12.5
Ludlow (1-10) .....	DPL	5	Champaign	12.5
E. Sidney (1-15) .....	DPL	2	Shelby	69
Mechanicsburg (1-16) .....	DPL	5	Champaign	12.5
S. W. Troy (1-19) .....	DPL	2	Miami	12.5
Lower Miami (1-20) .....	DPL	2	Miami	12.5
N. Lippincott (1-24) .....	DPL	5	Champaign	12.5

<u>Buckeye Member and Delivery Points</u>	<u>Delivering Company</u>	<u>Map Sheet</u>	<u>County</u>	<u>Delivery KV</u>
<b>SOUTH CENTRAL POWER COMPANY</b>				
West Lancaster (65-T10).....	OPC	8	Fairfield	69
Enterprise (65-T12) .....	OPC	8	Hocking	69
Baltimore (65-T14).....	OPC	8	Fairfield	69
Somerset (65-20) .....	OPC	8	Perry	69
Geneva (65-26) .....	OPC	8	Fairfield	69
Picway (65-T4).....	CSO	5	Pickaway	40
Andersonville (65-T17).....	CSO	5	Ross	69
Darbyville (65-2) .....	CSO	5	Pickaway	69
Kinderhook (65-T5).....	CSO	5	Pickaway	69
Lattaville (65-T60) .....	CSO	6	Ross	69
Petersburg (65-61).....	CSO	6	Highland	69
New Market (65-62).....	CSO	6	Highland	69
Idaho (65-T63) .....	CSO	6	Pike	69
Falls Road (65-64) .....	CSO	6	Ross	12.5
Eastwood (65-65) .....	CGE	3	Brown	34.5
<b>SOUTHEASTERN MICHIGAN RURAL ELECTRIC COOPERATIVE, INC.</b>				
Fayette (M5-6).....	TEC	1	Fulton	34.5
White City (M5-7) .....	TEC	1	Fulton	12.5
Burlington (M5-8).....	TEC	1	Fulton	12.5
<b>TRICOUNTY RURAL ELECTRIC COOPERATIVE, INC.</b>				
Delta (68-1) .....	TEC	1	Fulton	12.5
Liberty (68-2) .....	TEC	1	Fulton	34.5
Okolona (68-3).....	TEC	1	Henry	12.5
McClure (68-4) .....	TEC	1	Henry	34.5
Maroe (68-5) .....	TEC	1	Henry	34.5
New Liberty (68-8).....	TEC	1	Henry	69

## D-6

<u>Buckeye Member and Delivery Points</u>	<u>Delivering Company</u>	<u>Map Sheet</u>	<u>County</u>	<u>Delivery KV</u>
UNITED RURAL ELECTRIC				
St. Route #67 (85-T1).....	OPC	4	Hardin	23
Route 31 (85-2).....	OPC	4	Hardin	23
West Newton (85-3).....	OPC	1	Allen	138
WASHINGTON ELECTRIC COOPERATIVE, INC.				
South Olive (93-1) .....	MPC	11	Noble	23
Leith Run (93-T2) .....	MPC	11	Washington	23
Highland Ridge (93-3).....	MPC	11	Washington	23
Watertown (93-4) .....	MPC	11	Washington	23
Sarahsville (93-5) ..	OPC	11	Noble	34.5

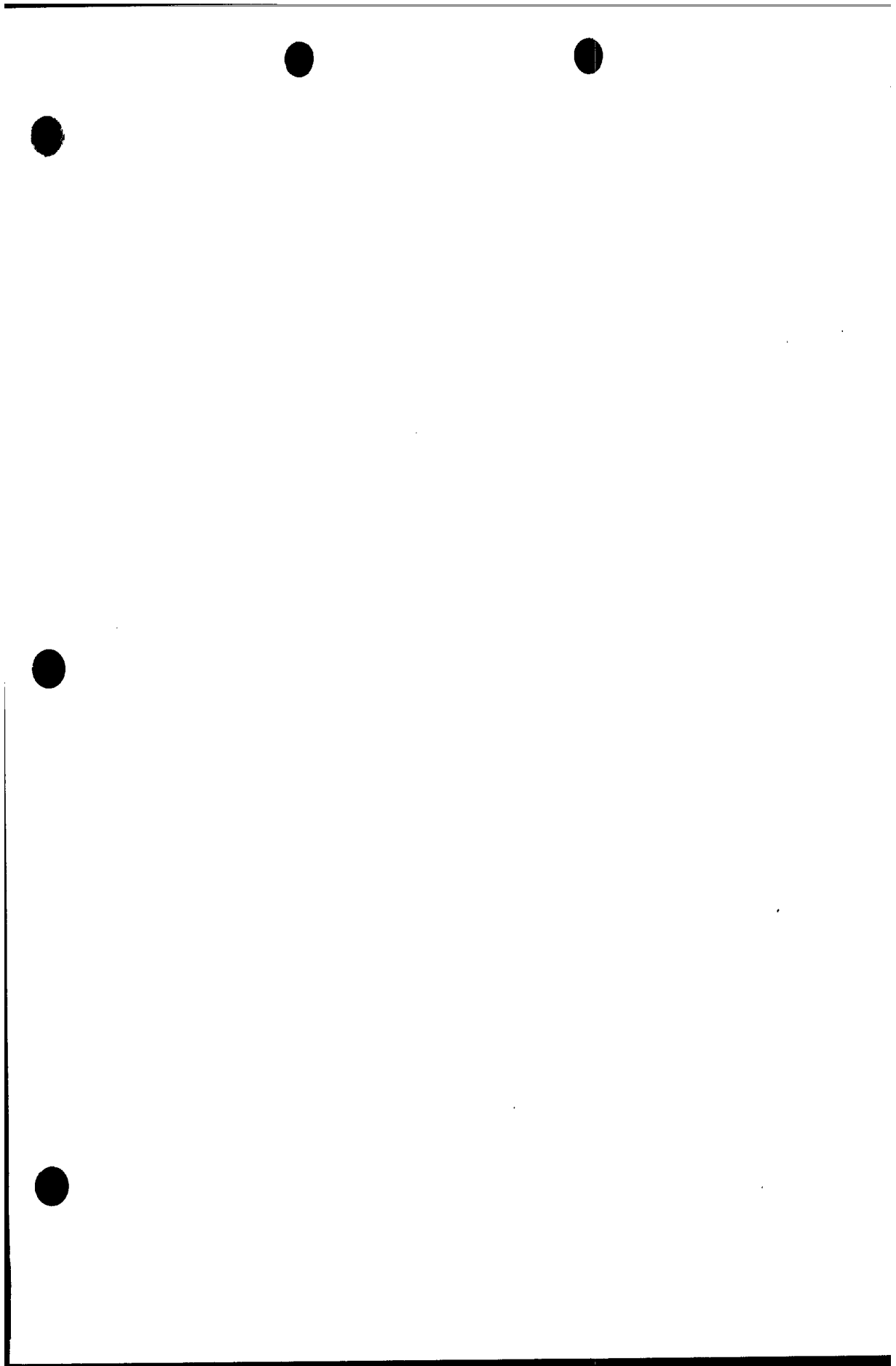
# MAP SHEETS INDICATING SITES OF INITIAL AND FUTURE DELIVERY POINTS

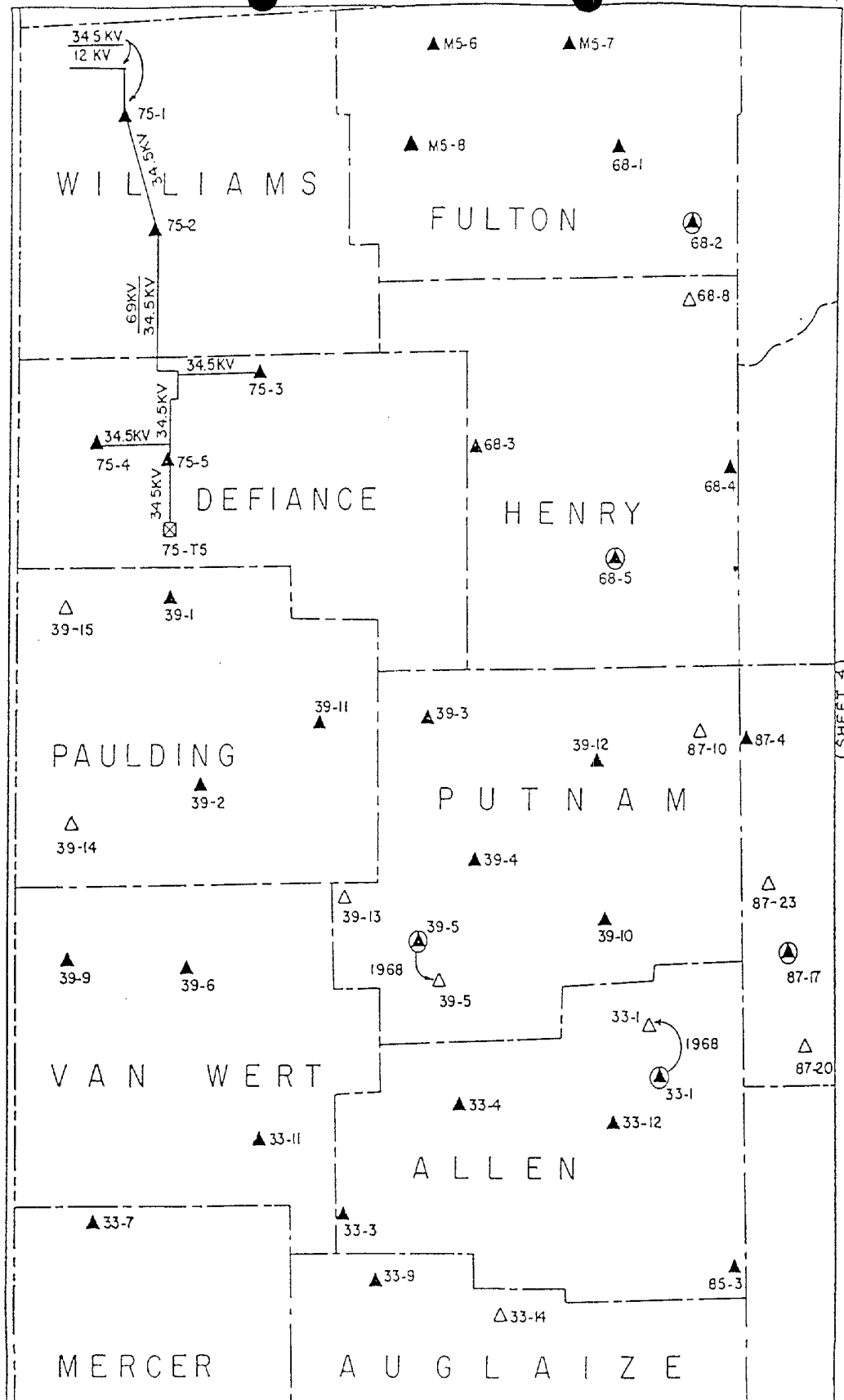
## LEGEND

for

## MAP SHEETS

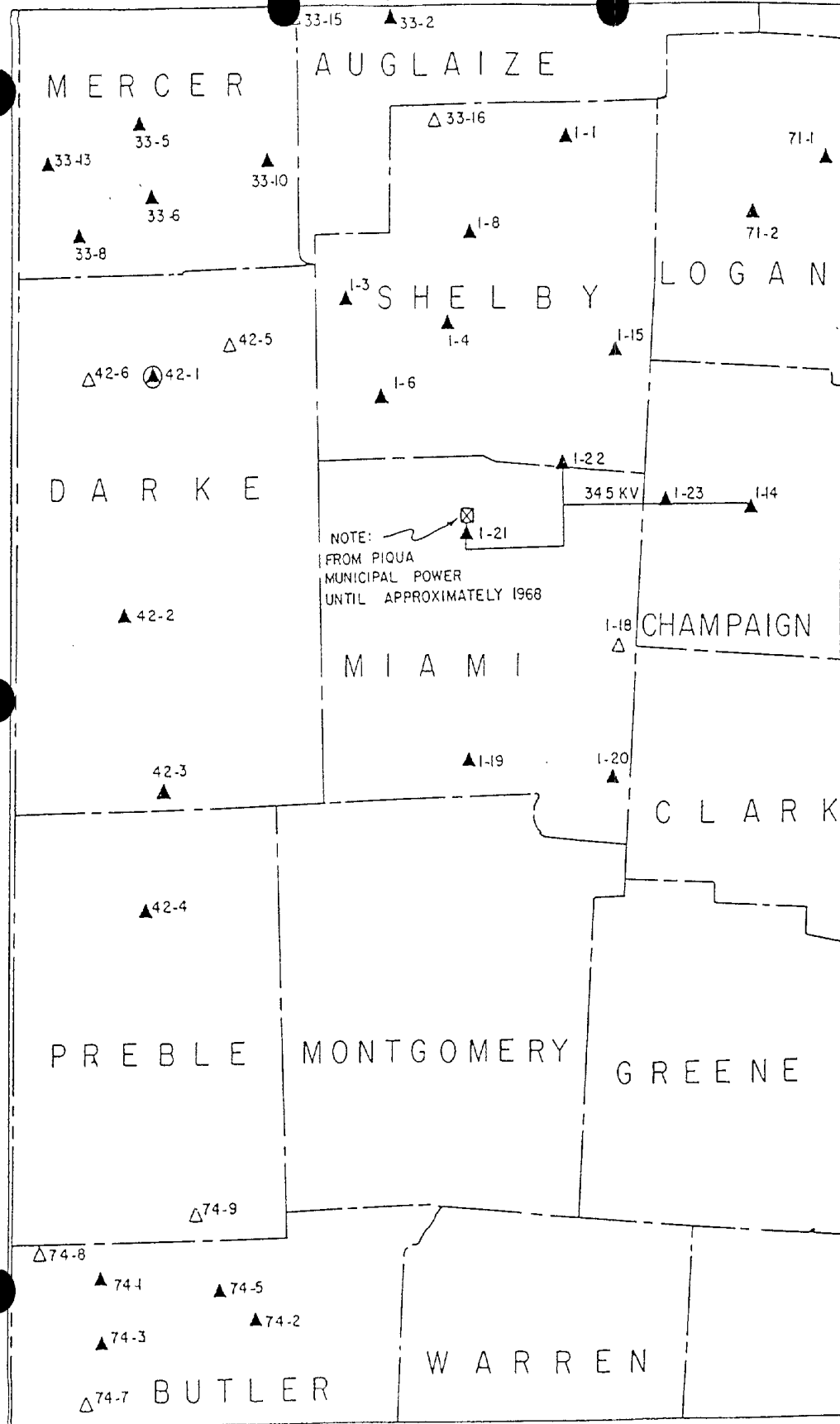
- ▲ Initial Delivery Point or existing Buckeye Member substation.
- ☒ Initial Delivery Point—transmission switching station.
- △ Future Delivery Point or anticipated Buckeye Member substation.
- Future Delivery Point—transmission switching station.
- ⊙ Delivery Point to be abandoned.
- ⊗ Delivery Point to be abandoned—transmission switching station.
- 65-20 Indicates a Delivery Point (or Buckeye Member substation). The first number (65) indicates the Buckeye Member and the second number (20) identifies the Delivery Point or Buckeye Member substation.
- 65-T4 Where a "T" is used before the second number (T4) the "T" indicates a transmission switching station Delivery Point and the number (4) indicates the nearest Buckeye Member substation being supplied from this Delivery Point.
- Existing Buckeye Member line.
- Proposed Buckeye or Buckeye Member line.
- $\frac{69 \text{ KV}}{40 \text{ KV}}$  Indicates line constructed for operation at 69 KV but operating at 40KV.





(SHEET 1)

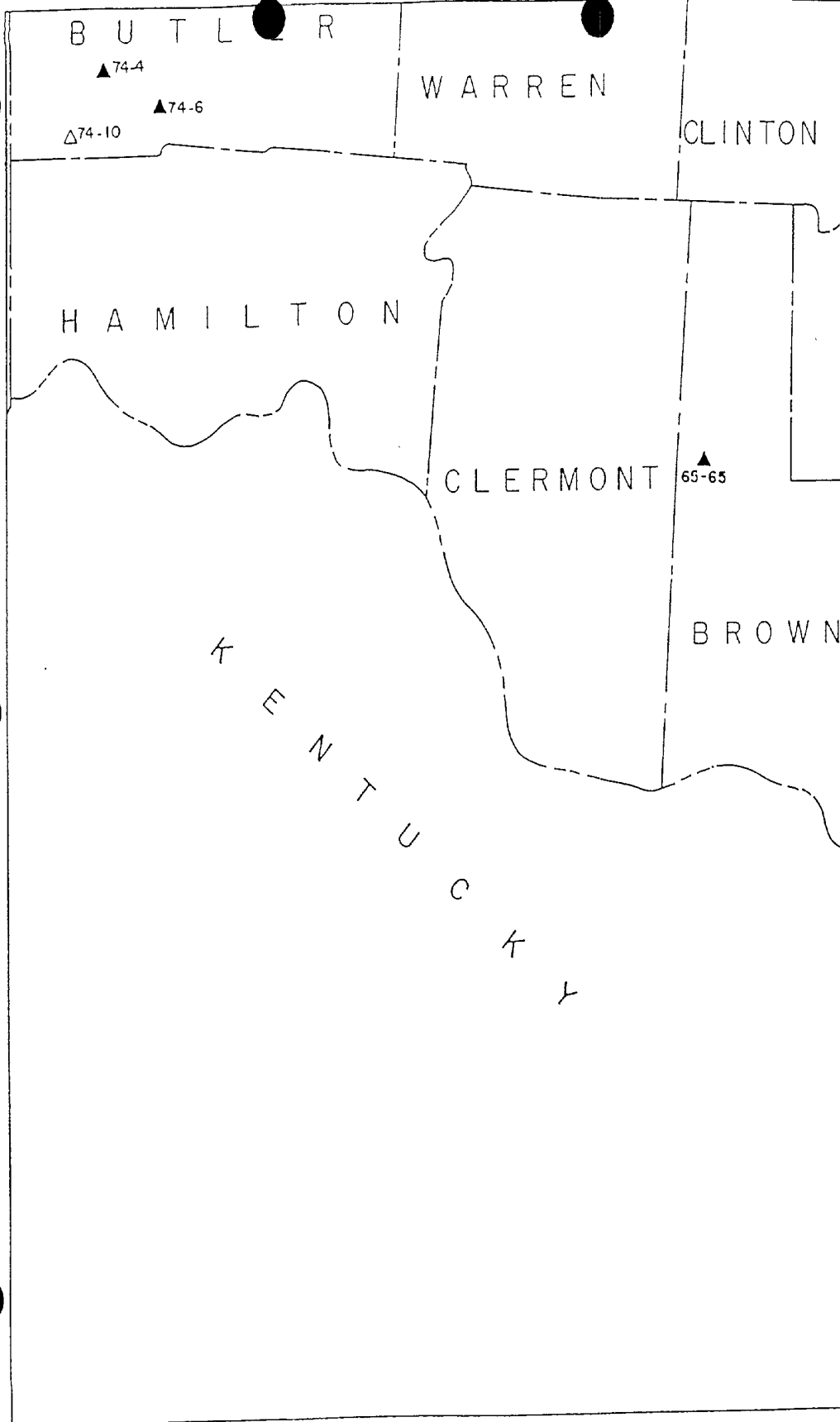
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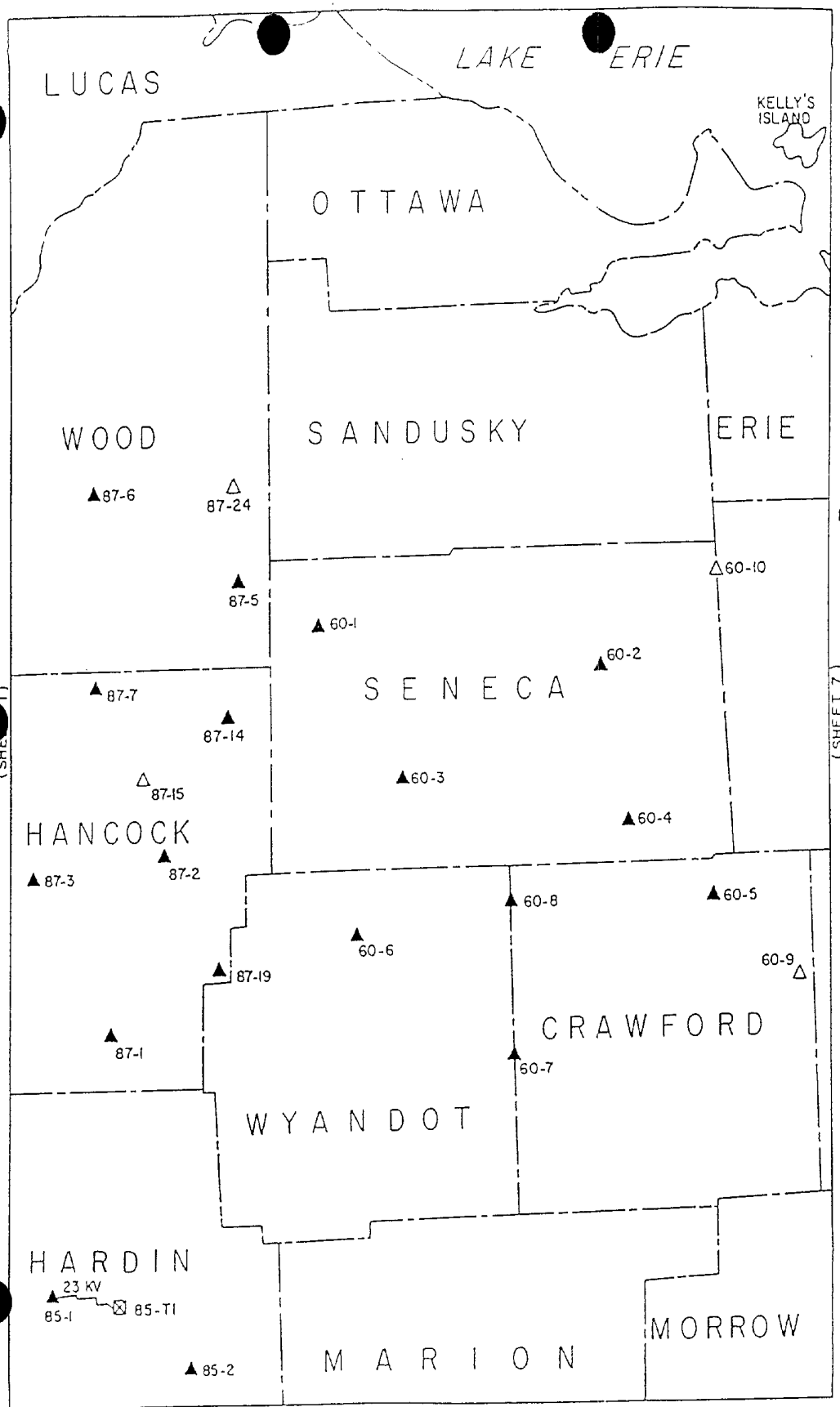
(SHEET 3)

(SHEET 5)





(SHEET 6)



(SHEET 5)

MAP SHEET 4

(SHEET 4)

HARDIN MARION MORROW

LOGAN UNION DELAWARE

CHAMPAIGN

CLARK MADISON FRANKLIN

PICKAWAY

FAYETTE

CLINTON ROSS

(SHEET 2)

(SHEET 6)

65-T4 1972 138 KV

69 KV 40 KV

65-24

65-32

69 KV

65-4

65-11

69 KV

65-13

65-6

65-5

69 KV

65-T5

65-18

69 KV

65-17

65-T7

65-16

69 KV

65-50

69 KV

65-T2

65-2

65-11

65-13

65-6

65-5

65-T5

65-18

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65-T7

65-16

65-15

65-27

65-35

71-4

71-3

71-5

1-24

1-13

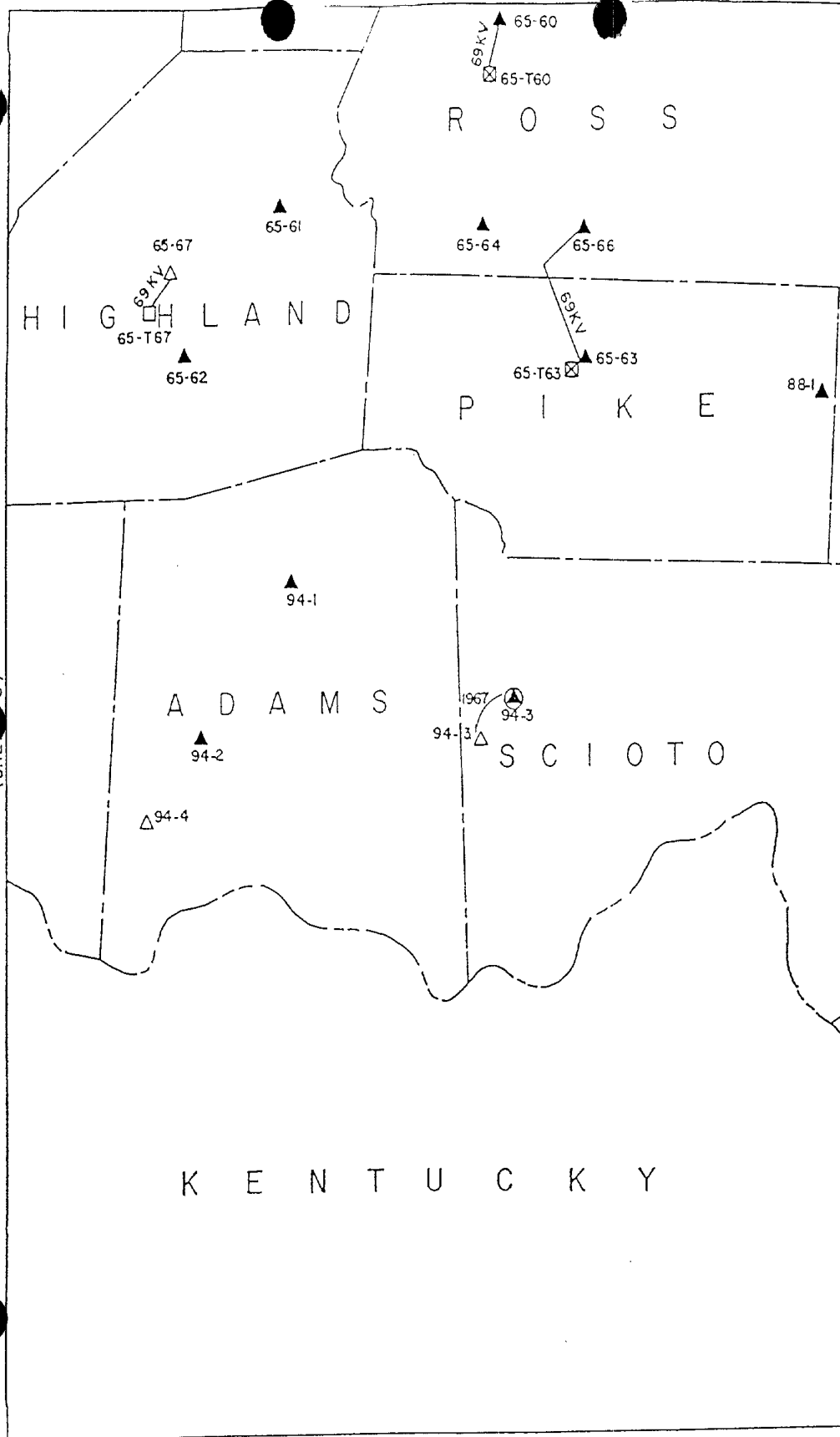
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1-10

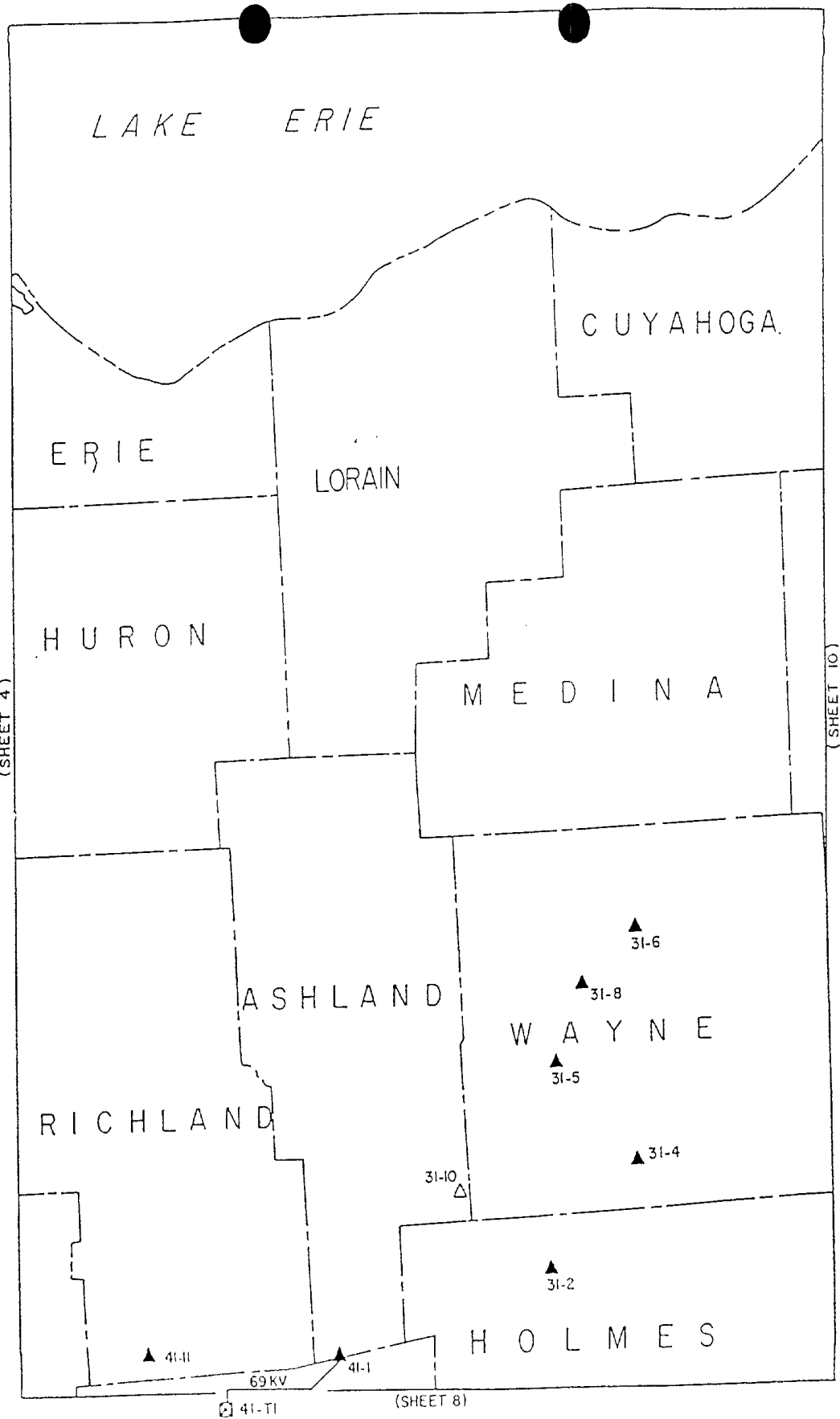
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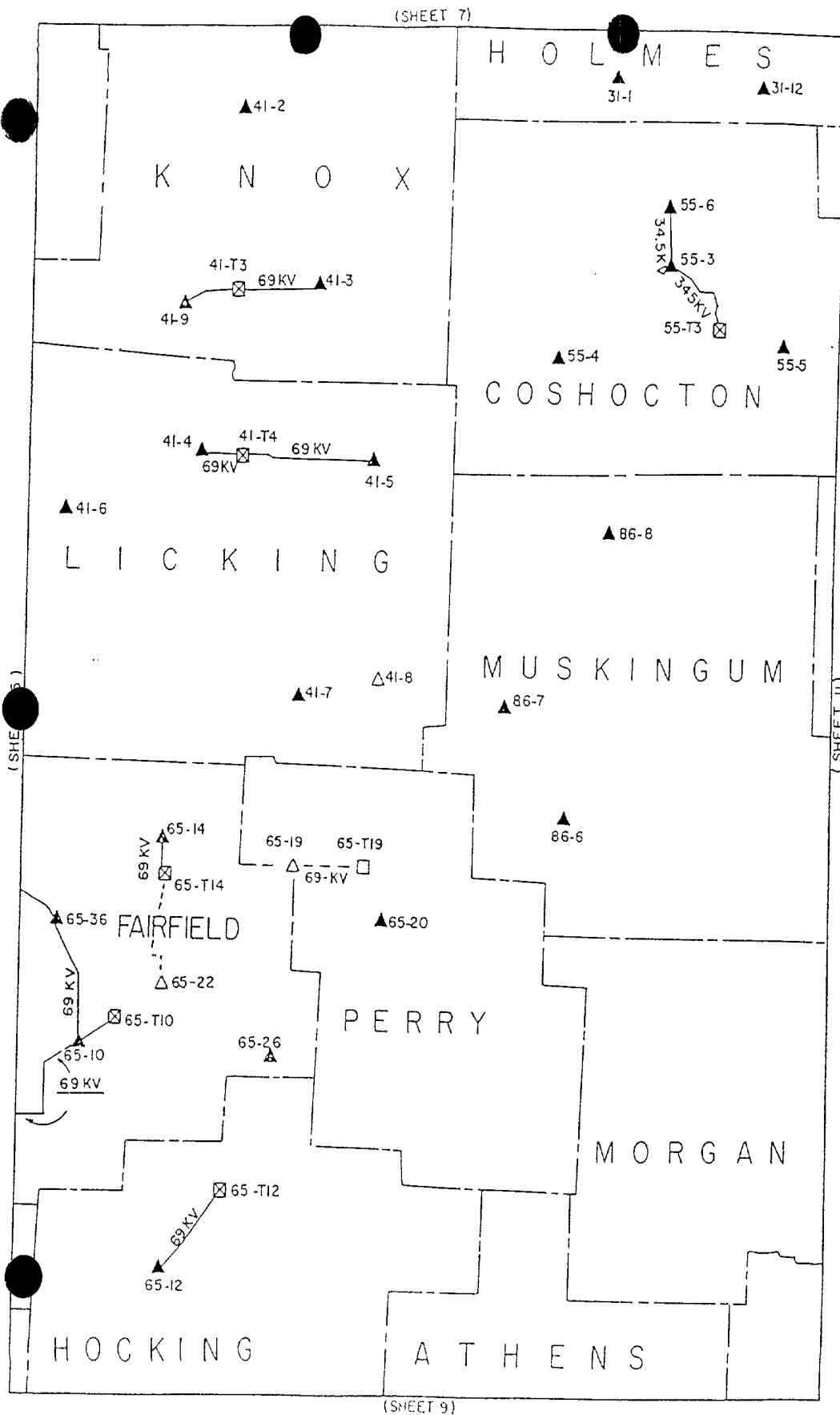
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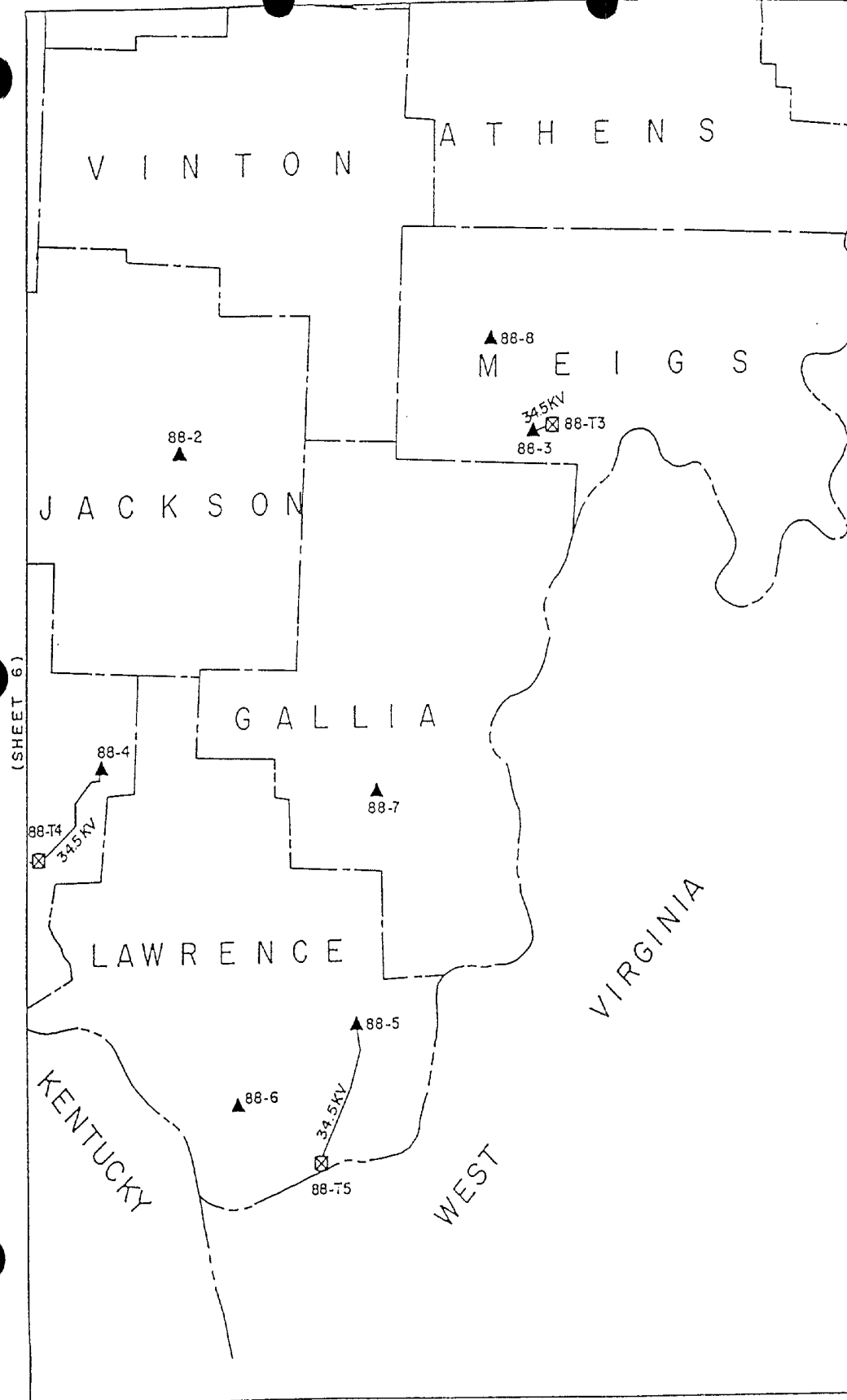
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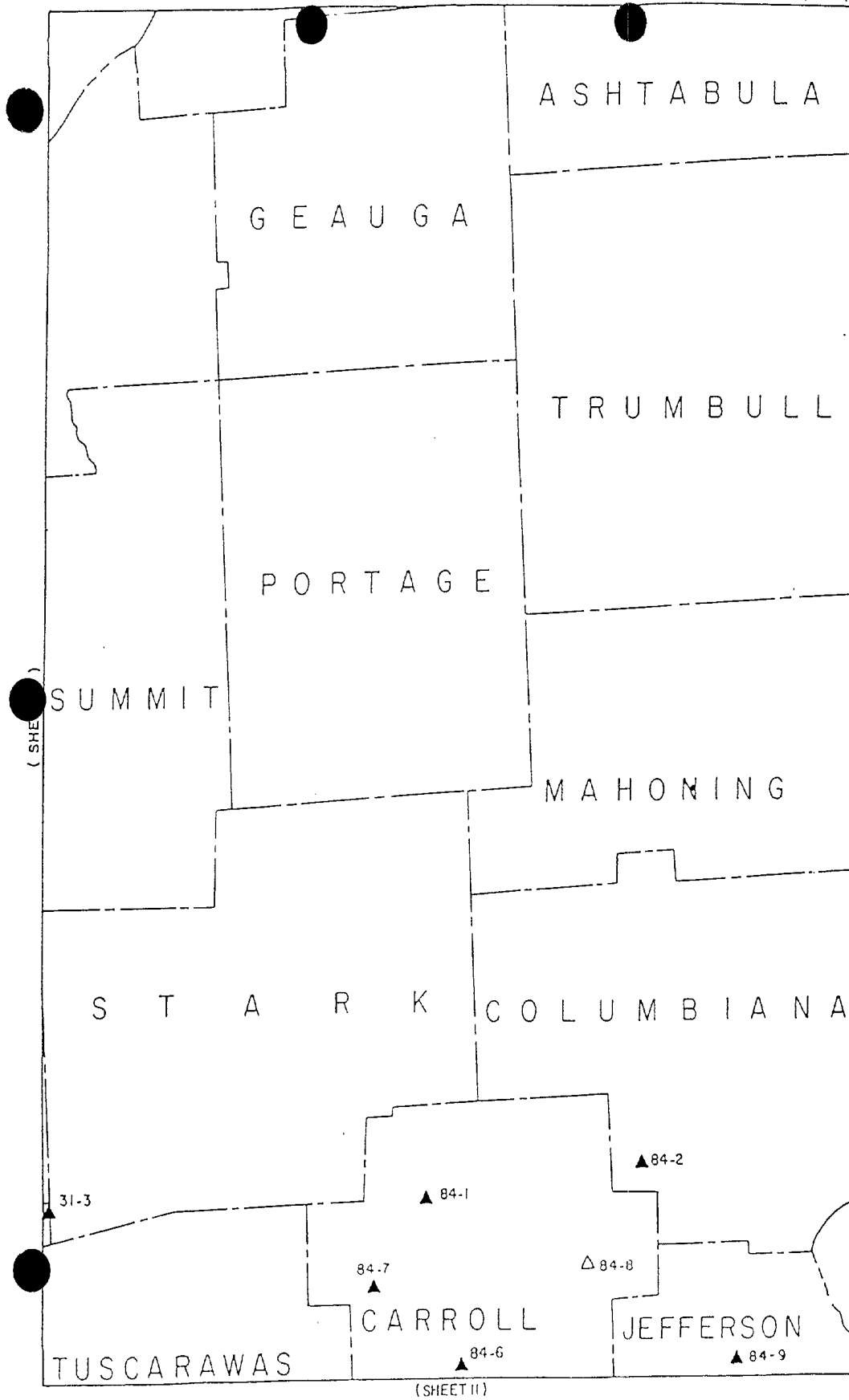


MAP SHEET 6





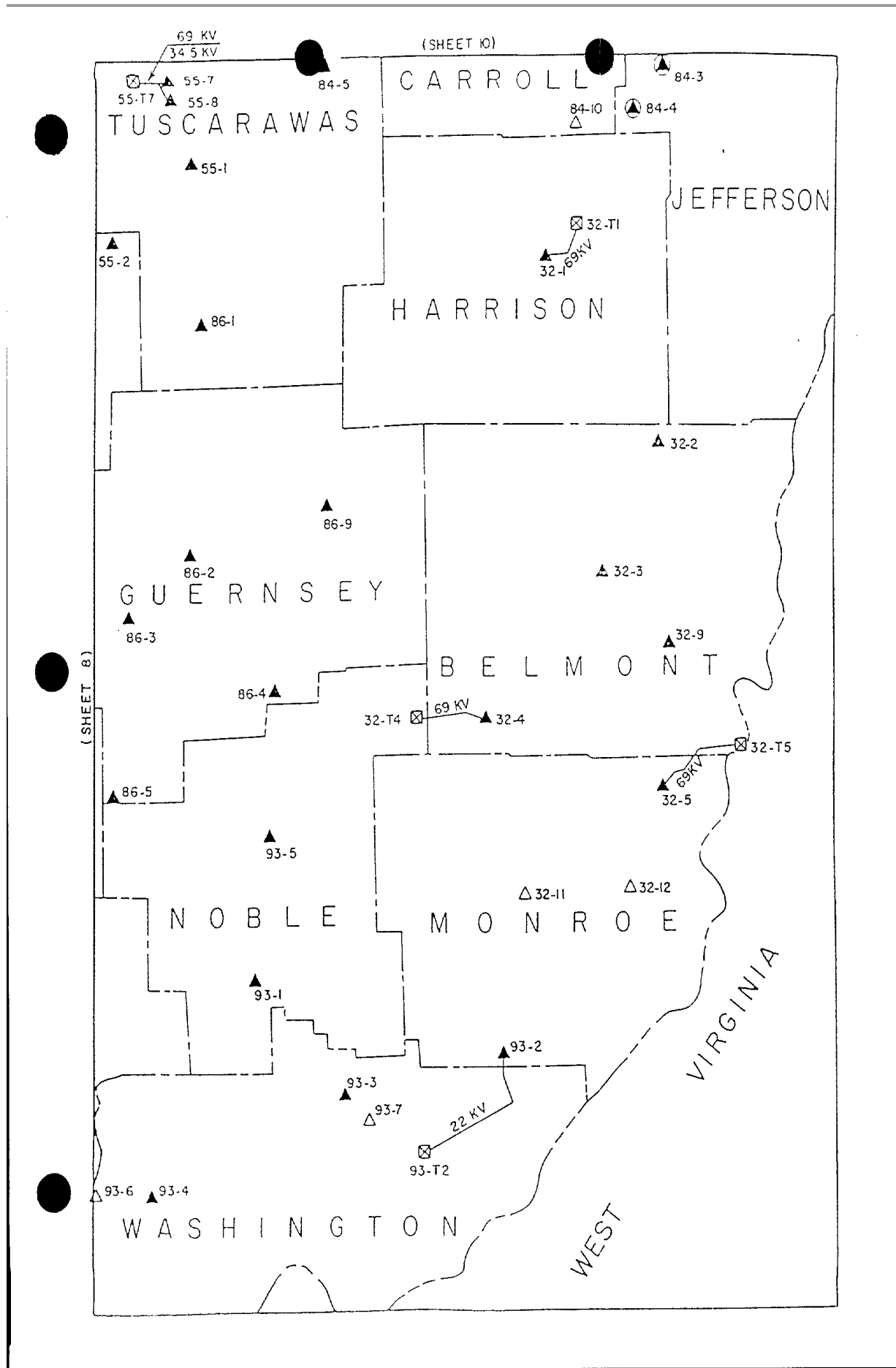




(SHEET II)

MAP SHEET 10





## APPENDIX E

### FUTURE DELIVERY POINTS

<u>Buckeye Member and Future Delivery Points</u>	<u>Map Sheet</u>	<u>County</u>	<u>Anticipated Year Required</u>
ADAMS RURAL ELECTRIC COOPERATIVE, INC.			
Bentonville (94-4).....	6	Adams	1968
Otway (94-3).....	6	Scioto	1968
BELMONT ELECTRIC COOPERATIVE, INC.			
#39 (32-11).....	11	Monroe	1970
#45 (32-12).....	11	Monroe	1970
BUCKEYE RURAL ELECTRIC COOPERATIVE, INC.			
None			
BUTLER RURAL ELECTRIC COOPERATIVE, INC.			
Reily (74-7).....	2	Butler	1969
Todd (74-8).....	2	Butler	1970
Gratis (74-9).....	2	Preble	1971
Chapel (74-10).....	3	Butler	1971
CARROLL ELECTRIC COOPERATIVE, INC.			
Fox (84-8).....	10	Carroll	1970
Loudon (84-10).....	11	Carroll	1971
DARKE RURAL ELECTRIC COOPERATIVE, INC.			
Yorkshire (42-5).....	2	Darke	1969
Lightsville (42-6).....	2	Darke	1969
FRONTIER POWER COMPANY			
None			
GUERNSEY-MUSKINGUM ELECTRIC COOPERATIVE, INC.			
None			
HANCOCK-WOOD ELECTRIC COOPERATIVE, INC.			
Townwood (87-10).....	1	Putnam	1968
N. Findlay (87-15).....	4	Hancock	1968
Bluffton (87-20).....	1	Hancock	1969
Cory (87-23).....	1	Hancock	1969
Bradner (87-24).....	4	Wood	1970

NOTE: Map sheet references are to map contained in Appendix D.

## E-2

<u>Buckeye Member and Future Delivery Points</u>	<u>Map Sheet</u>	<u>County</u>	<u>Anticipated Year Required</u>
HOLMES-WAYNE ELECTRIC COOPERATIVE, INC.			
Mohicanville (31-10).....	7	Ashland	1971
LICKING RURAL ELECTRIFICATION, INC.			
Flint Ridge (41-8).....	8	Licking	1968
LOGAN COUNTY COOPERATIVE POWER & LIGHT ASS'N, INC.			
None			
MIDWEST ELECTRIC, INC.			
Cridersville (33-14).....	1	Auglaize	1970
St. Marys (33-15).....	2	Mercer	1968
New Knoxville (33-16).....	2	Shelby	1971
Rockport (33-1).....	1	Allen	1968
NORTH CENTRAL ELECTRIC COOPERATIVE, INC.			
#9 (60-9).....	4	Crawford	1970
#10 (60-10).....	4	Seneca	1970
NORTH WESTERN ELECTRIC COOPERATIVE, INC.			
None			
PAULDING-PUTNAM ELECTRIC COOPERATIVE, INC.			
Ottoville (39-5).....	1	Putnam	1968
Roselms (39-13).....	1	Putnam	1968
Payne (39-14).....	1	Paulding	1970
Antwerp (39-15).....	1	Paulding	1970
PIONEER RURAL ELECTRIC COOPERATIVE, INC.			
W. Mingo (1-13).....	5	Champaign	1969
Woodstock (1-17).....	5	Union	1969
E. Casstown (1-18).....	2	Miami	1968
Piqua (1-T21).....	2	Miami	1970

E-3

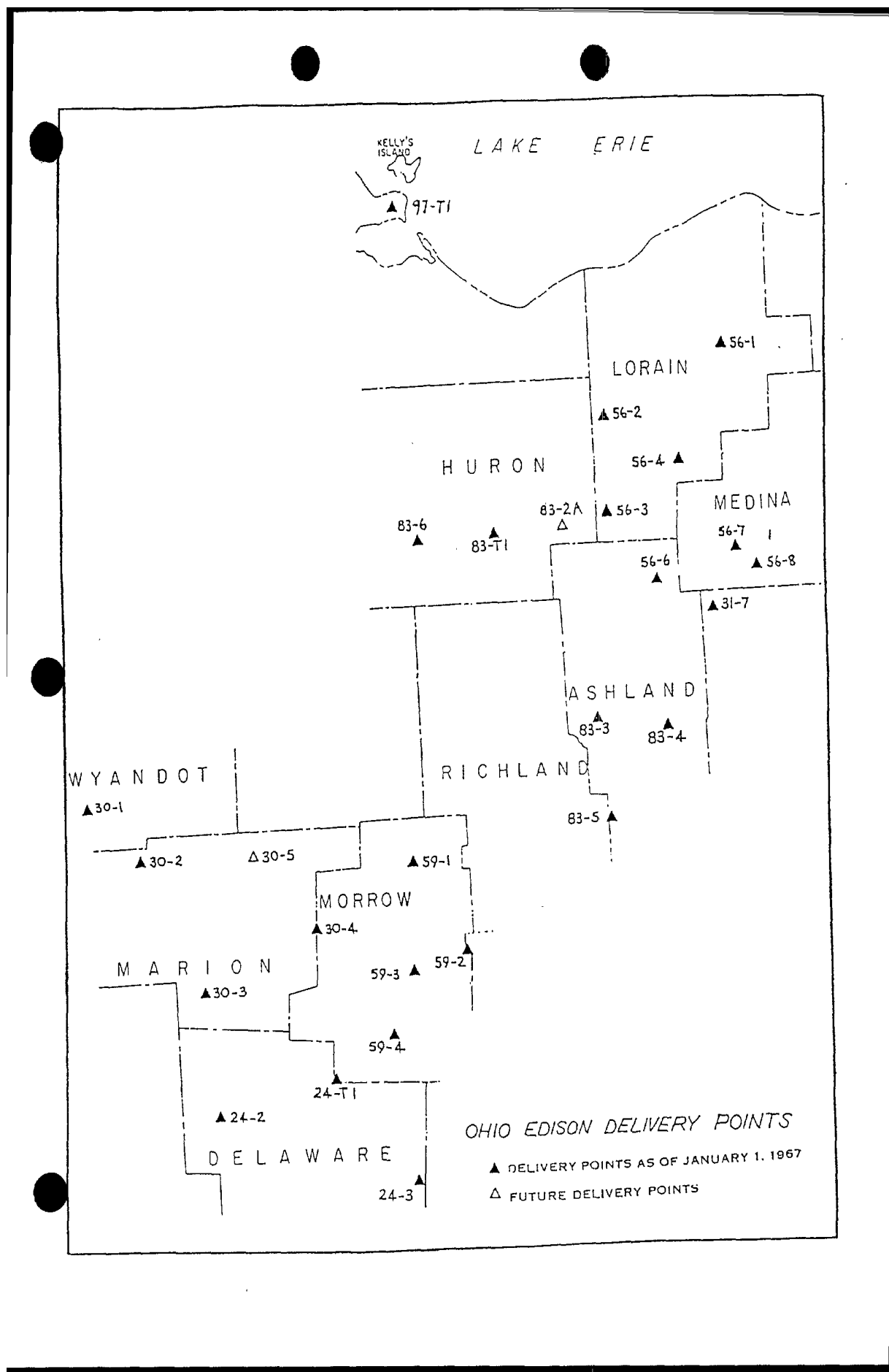
<u>Buckeye Member and Future Delivery Points</u>	<u>Map Sheet</u>	<u>County</u>	<u>Anticipated Year Required</u>
SOUTH CENTRAL POWER COMPANY			
Darbyville (65-T2).....	5	Pickaway	1972
Harrison Sta. (65-T4).....	5	Franklin	1972
N. Somerset (65-T19).....	8	Perry	1972
Duckwall (65-T67).....	6	Highland	1970
SOUTHEASTERN MICHIGAN RURAL ELECTRIC COOPERATIVE, INC.			
None			
TRICOUNTY RURAL ELECTRIC COOPERATIVE, INC.			
None			
UNITED RURAL ELECTRIC			
None			
WASHINGTON ELECTRIC COOPERATIVE, INC.			
#6 (93-6).....	11	Washington	1971
#7 (93-7).....	11	Washington	1971

# APPENDIX F

## OHIO EDISON DELIVERY POINTS

<u>Buckeye Member and Delivery Points</u>	<u>County</u>	<u>Delivery KV</u>
DELAWARE RURAL ELECTRIC COOPERATIVE, INC.		
Oxford (24-T1).....	Morrow	69
Scioto (24-2).....	Delaware	69
Hartford (24-3).....	Delaware	69
FIRELANDS ELECTRIC COOPERATIVE, INC.		
Fitchville (83-T1).....	Huron	69
*New London (83-2A).....	Huron	69
Ashland (83-3).....	Ashland	34.5
Jeromesville (83-4).....	Ashland	34.5
Coulter (83-5).....	Ashland	23
Steuben (83-6).....	Huron	69
HOLMES-WAYNE ELECTRIC COOPERATIVE, INC.		
West Salem (31-7).....	Wayne	69
LAKE ERIE ELECTRIC COOPERATIVE, INC.		
Lakeside (97-T1).....	Ottawa	12.5
LORAIN-MEDINA RURAL ELECTRIC COOPERATIVE, INC.		
Robson Road (56-1).....	Lorain	69
Baird Road (56-2).....	Lorain	69
Nova (56-3).....	Lorain	69
Central (56-4).....	Lorain	69
Sullivan (56-6).....	Ashland	69
Repp (56-7).....	Medina	69
Burbank (56-8).....	Medina	69
MARION RURAL ELECTRIC COOPERATIVE, INC.		
Brownstown (30-1).....	Wyandot	34.5
Meeker (30-2).....	Marion	34.5
Uncapher (30-3).....	Marion	34.5
Edison (30-4).....	Marion	69
*Harvey (30-5).....	Marion	34.5
MORROW ELECTRIC COOPERATIVE, INC.		
Snyder (59-1).....	Morrow	69
Debolt (59-2).....	Knox	69
Yankce (59-3).....	Morrow	69
Harmony (59-4).....	Morrow	69

\* To be established prior to January 1, 1969.



# APPENDIX G

## CONVERSION ALLOWANCES FOR BUCKEYE MEMBER LINES

<u>Line</u>	<u>Present Voltage</u>	<u>Length Miles</u>	<u>Year Built</u>	<u>Original Cost</u>	<u>Estimated Conversion Date</u>	<u>Estimated Conversion Cost</u>
OHIO POWER COMPANY						
Buckeye Rural Electric Cooperative, Inc. 88-T3 to 88-3 (Rutland).....	34.5 kv	0.44	1946	\$ 1,404.11	1975	\$ 3,000
Buckeye Rural Electric Cooperative, Inc. 88-T4 to 88-4 (So. Webster).....	34.5 kv	7.36	1946	37,739.04	1970	26,000
Buckeye Rural Electric Cooperative, Inc. 88-T5 to 88-5 (Scottown).....	34.5 kv	8.69	1950	58,764.06	1975	35,000
Frontier Power Company 55-T3 to 55-3 (Coshocton)	34.5 kv	6.75	1949	53,560.20	1972	27,000
Frontier Power Company 55-3 (Coshocton) to 55-6 (Blue Crystal) (Extension of 55-T3 to 55-3)	34.5 kv	4.25	1960	31,210.68	1972	17,000
United Rural Electric 85-T1 to 85-1 (Lynn, Rt. 67).....	23 kv	6.30	1938	9,222.85	1975	22,000
MONONGAHELA POWER COMPANY						
Washington Electric Cooperative, Inc. 93-T2 to 93-2 (Leith Run).....	23 kv	7.70	1951	43,876.57	1975	28,000

NOTE: Line designation numbers refer to map contained in Appendix D.

## APPENDIX H

### BASIC FORMULA FOR MONTHLY ALLOTMENT OF DELIVERY CHARGE AMONG COMPANIES

#### DEFINITIONS.

"Dr" means the amount allocable among the several Companies out of the total Delivery Charge payable for any month by Buckeye under the foregoing Power Delivery Agreement.

"D<sub>1</sub>", "D<sub>2</sub>", "D<sub>3</sub>", "D<sub>4</sub>", "D<sub>5</sub>" and "D<sub>6</sub>" means the demand ratio applicable respectively to Ohio, Cincinnati, Columbus, Dayton, Toledo and Monongahela determined as provided in Section 9.1(d) of the aforesaid Power Delivery Agreement.

"D<sub>1</sub>r<sub>1</sub>" means the portion of the Delivery Charge allotted to Ohio for such month.

"D<sub>2</sub>r<sub>2</sub>" means the portion of the Delivery Charge allotted to Cincinnati for such month.

"D<sub>3</sub>r<sub>3</sub>" means the portion of the Delivery Charge allotted to Columbus for such month.

"D<sub>4</sub>r<sub>4</sub>" means the portion of the Delivery Charge allotted to Dayton for such month.

"D<sub>5</sub>r<sub>5</sub>" means the portion of the Delivery Charge allotted to Toledo for such month.

"D<sub>6</sub>r<sub>6</sub>" means that portion of the Delivery Charge allotted to Monongahela for such month.

"I<sub>1</sub>", "I<sub>2</sub>", "I<sub>3</sub>", "I<sub>4</sub>", "I<sub>5</sub>" and "I<sub>6</sub>" means the investment ratio applicable respectively to Ohio, Cincinnati, Columbus, Dayton, Toledo and Monongahela.

The basic equation and the derivation thereof governing the allotment procedure follow:

$$r_2 \text{ equals } I_2 r_1 \text{ (Cincinnati)}$$

$$r_3 \text{ equals } I_3 r_1 \text{ (Columbus)}$$

$$r_4 \text{ equals } I_4 r_1 \text{ (Dayton)}$$