ELECTRIC FORECAST REPORTS

4901:5-5-01	DEFINITIONS
4901:5-5-02	FORECASTS FOR ELECTRIC TRANSMISSION OWNERS OR EDUS, GENERAL GUIDELINES.
4901:5-5-03	FORECASTS FOR ELECTRIC TRANSMISSION OWNERS.
4901:5-5-04	FORECASTS FOR ELECTRIC DISTRIBUTION UTILITIES (EDUS).

4901:5-5-01 DEFINITIONS.

THE FOLLOWING DEFINITIONS APPLY TO THIS CHAPTER:

(A) “ATC” MEANS AVAILABLE TRANSFER CAPABILITY AND IS THE PORTION OF TOTAL TRANSFER CAPACITY REMAINING IN THE PHYSICAL TRANSMISSION SYSTEM FOR FURTHER COMMERCIAL ACTIVITY OVER AND ABOVE ALREADY COMMITTED WHOLESALE AND RETAIL USES.

(B) "ECAR" IDENTIFIES AN ELECTRIC RELIABILITY COUNCIL OR A SUCCESSOR ORGANIZATION, WHICH FUNCTIONS WITHIN A GEOGRAPHIC AREA THAT INCLUDES INDIANA, OHIO, AND PARTS OF KENTUCKY, MARYLAND, MICHIGAN, PENNSYLVANIA, TENNESSEE, WEST VIRGINIA, AND VIRGINIA. THE ELECTRIC UTILITY SYSTEMS IN THIS AREA THAT ARE ENGAGED IN THE GENERATION, TRANSMISSION, AND SALE OF ELECTRIC POWER AND ENERGY ARE THE PARTIES TO A FORMAL AGREEMENT ENTITLED, "EAST CENTRAL AREA RELIABILITY COORDINATION AGREEMENT” OR A SIMILAR AGREEMENT OF A SUCCESSOR ORGANIZATION.

(C) "EEI” MEANS EDISON ELECTRIC INSTITUTE.

(D) "FORECAST YEAR," "YEAR OF THE FORECAST," OR "YEAR ZERO" MEANS THE YEAR IN WHICH THE FORECAST IS FILED.

(E) "FORECAST PERIOD" MEANS YEAR ZERO THROUGH YEAR TEN.

(F) “INTEGRATED OPERATING SYSTEM” MEANS A GROUP OF ELECTRIC TRANSMISSION OWNERS OR EDUS WHO ARE MEMBERS OF A JOINTLY OR COMMONLY OPERATED SYSTEM AS A SINGLE ENTITY.

(G) "LOAD" MEANS THE AMOUNT OF POWER NEEDED TO BE DELIVERED AT A GIVEN POINT ON AN ELECTRIC SYSTEM.

(H) "PEAK DEMAND" OR "PEAK LOAD" MEANS THE ELECTRIC TRANSMISSION OWNER OR EDU’S MAXIMUM SIXTY-MINUTE

INTEGRATED CLOCK HOUR NATIVE LOAD PREDICTED (OR ACTUAL) FOR THE YEAR.

(I) "SERVICE AREA," MEANS THE GEOGRAPHIC AREA IN WHICH THE ELECTRIC TRANSMISSION OWNER OR EDU RENDERS SERVICE TO WHOLESALE OR RETAIL CONSUMERS OF ENERGY.

(J) "TRANSFER CAPABILITY," MEANS THE CAPABILITY OF THE ELECTRIC TRANSMISSION OWNER OR EDU'S SYSTEM TO DELIVER OR TRANSFER POWER FROM ALL POINTS OF RECEIPTS TO ALL DELIVERY POINTS.

(K) "TTC" MEANS TOTAL TRANSFER CAPACITY AND IS THE AMOUNT OF ELECTRIC POWER THAT CAN BE TRANSFERRED FROM ONE CONTROL AREA TO ANOTHER OVER THE INTERCONNECTED TRANSMISSION NETWORK IN A RELIABLE MANNER WHILE MEETING ALL OF A SPECIFIC SET OF DEFINED PRE- AND POST-CONTINGENCY SYSTEM CONDITIONS. TTC IS THE LESSER OF THE NETWORK TRANSFER CAPABILITY OR CONTRACT PATH CAPACITY (I.E., THE SUM OF CAPACITIES OF ALL INTERCONNECTIONS TO A NEIGHBORING CONTROL AREA).

Replaces: part of 4901:5-5-01
former 4901:5-9

Effective:

Certification _____
Gary Vigorito, Secretary

_____
Date

Promulgated under R. C. Sec. 111.15
Authorized by R.C. Sec. 4935.01, 4935.02, 4935.04
Rule amplifies R.C. 4935.01, 4935.02, 4935.04
119.032 Review date: 11/30/00
Prior effective dates: 7/26/78; 4/2/83; 6/1/83; 7/2/84; 10/14/85; 11/20/87; 1/15/90; 3/24/97
(4901:5-9) 1/15/90

4901:5-5-02 FORECASTS FOR ELECTRIC TRANSMISSION OWNERS OR EDUS, GENERAL GUIDELINES.

(A) SUMMARY OF THE LONG-TERM FORECAST REPORT.

THE LONG-TERM FORECAST REPORT SHALL CONTAIN A SUMMARY THAT SHALL INCLUDE AT A MINIMUM:

(1) THE PLANNING OBJECTIVES;

(2) A SUMMARY OF THE FORECAST ENERGY AND PEAK LOAD DEMANDS AND THE KEY ASSUMPTIONS OR PROJECTIONS;

(3) A DESCRIPTION OF THE PROCESS BY WHICH THE LOAD FORECAST WAS DEVELOPED.

(B) GENERAL GUIDELINES. THE FOLLOWING GUIDELINES SHALL BE USED IN THE PREPARATION OF THE FORECAST:

(1) THE FORECAST MUST BE BASED UPON INDEPENDENT ANALYSIS BY THE REPORTING ELECTRIC TRANSMISSION OWNER OR EDU.

(2) THE FORECAST MAY BE BASED ON THOSE FORECASTING METHODS THAT YIELD THE MOST USEFUL RESULTS TO THE ELECTRIC TRANSMISSION OWNER OR EDU.

(3) WHERE THE REQUIRED DATA HAVE NOT BEEN CALCULATED DIRECTLY, RELEVANT CONVERSION FACTORS SHALL BE DISPLAYED.

(C) SPECIAL SUBJECT AREAS.

(1) THE FOLLOWING MATTERS SHALL SPECIFICALLY BE ADDRESSED:

(a) A DESCRIPTION OF THE EXTENT TO WHICH THE REPORTING ELECTRIC TRANSMISSION OWNER OR EDU COORDINATES ITS LOAD FORECASTS WITH THOSE OF OTHER SYSTEMS SUCH AS AFFILIATED SYSTEMS IN A HOLDING COMPANY

GROUP, ASSOCIATED SYSTEMS IN AN INTEGRATED OPERATING SYSTEM OR OTHER COORDINATING ORGANIZATION, OR OTHER NEIGHBORING SYSTEMS;

(b) A DESCRIPTION OF THE MANNER IN WHICH SUCH FORECASTS ARE COORDINATED, AND ANY PROBLEMS EXPERIENCED IN EFFORTS TO COORDINATE LOAD FORECASTS; AND

(c) A BRIEF DESCRIPTION OF ANY POLLS, SURVEYS, OR DATA-GATHERING ACTIVITIES USED IN PREPARATION OF THE FORECAST.

(2) NO LATER THAN SIX MONTHS PRIOR TO THE REQUIRED DATE OF SUBMISSION OF THE FORECAST, THE COMMISSION SHALL SUPPLY REPORTING ELECTRIC TRANSMISSION OWNER OR EDU:

(a) COPIES OF APPROPRIATE COMMISSION OR OTHER STATE DOCUMENTS OR PUBLIC STATEMENTS THAT INCLUDE THE STATE ENERGY POLICY FOR CONSIDERATION IN PREPARATION OF THE FORECAST; AND

(b) SUCH CURRENT ENERGY POLICY CHANGES OR DELIBERATIONS, WHICH, DUE TO THEIR IMMEDIATE SIGNIFICANCE, THE COMMISSION DETERMINES TO BE RELEVANT FOR SPECIFIC IDENTIFICATION IN THE FORECAST (INCLUDING BUT NOT LIMITED TO NEW LEGISLATION, REGULATIONS, OR ADJUDICATORY FINDINGS).

(3) ENERGY-PRICE RELATIONSHIPS:

(a) TO THE EXTENT POSSIBLE, IDENTIFY THE RELATIONSHIP BETWEEN PRICE AND ENERGY CONSUMPTION AND DESCRIBE HOW SUCH CHANGES ARE ACCOUNTED FOR IN THE FORECAST; AND

(b) A DESCRIPTION OF, AND JUSTIFICATION FOR, THE METHODOLOGIES EMPLOYED FOR

DETERMINING SUCH ENERGY-PRICE RELATIONSHIPS SHALL BE INCLUDED.

(D) FORECAST DOCUMENTATION. THE PURPOSE OF THE DOCUMENTATION SECTION OF THE REPORT IS TO PERMIT A THOROUGH REVIEW OF THE FORECAST METHODOLOGY AND TEST ITS VALIDITY. THE COMPONENTS OF THE FORECAST DOCUMENTATION INCLUDE:

(1) A DESCRIPTION OF THE FORECAST METHODOLOGY EMPLOYED, INCLUDING:

(a) OVERALL METHODOLOGICAL FRAMEWORK CHOSEN;

(b) SPECIFIC ANALYTICAL TECHNIQUES USED, THEIR PURPOSE, AND THE FORECAST COMPONENT TO WHICH THEY ARE APPLIED;

(c) THE MANNER IN WHICH SPECIFIC TECHNIQUES ARE RELATED IN PRODUCING THE FORECAST;

(d) WHERE STATISTICAL TECHNIQUES HAVE BEEN USED:

(i) ALL RELEVANT EQUATIONS AND DATA;

(ii) THE SIZE OF THE STANDARD ERROR OF THE ESTIMATE, AND THE SIZE OF THE FORECASTING ERROR, ASSOCIATED WITH EACH RELEVANT FORECASTING MODEL EQUATION;

(iii) A DESCRIPTION OF THE TECHNIQUE;

(iv) THE REASON FOR CHOOSING THE TECHNIQUE; AND

(v) IDENTIFICATION OF SIGNIFICANT COMPUTER SOFTWARE USED.

(e) AN EXPLANATION OF HOW CONTROLLABLE AND INTERRUPTIBLE LOADS ARE FORECAST AND

HOW THEY ARE TREATED IN THE TOTAL FORECAST;

(f) AN IDENTIFICATION OF LOAD FACTORS OR OTHER RELEVANT CONVERSION FACTORS AND A DESCRIPTION OF HOW THEY ARE USED WITHIN THE FORECAST; AND

(g) WHERE THE METHODOLOGY FOR ANY SECTOR HAS CHANGED SIGNIFICANTLY FROM THE PREVIOUS YEAR, A DISCUSSION OF THE RATIONALE FOR THE CHANGE.

(2) ASSUMPTIONS AND SPECIAL INFORMATION. THE REPORTING ELECTRIC TRANSMISSION OWNER OR EDU SHALL:

(a) FOR EACH SIGNIFICANT ASSUMPTION MADE IN PREPARING THE FORECASTS INCLUDE A DISCUSSION OF THE BASIS FOR THE ASSUMPTION AND THE IMPACT IT HAS ON THE FORECAST RESULTS. GIVE SOURCES OF THE ASSUMPTION IF OTHER THAN THE REPORTING ELECTRIC TRANSMISSION OWNER OR EDU.

(b) IDENTIFY SPECIAL INFORMATION BEARING ON THE FORECAST (E.G., THE EXISTENCE OF A MAJOR PLANNED INDUSTRIAL EXPANSION PROGRAM IN THE AREA OF SERVICE OR OTHER NEED DETERMINED ON A REGIONAL BASIS).

(3) DATA BASE DOCUMENTATION. THE RESPONSIBILITIES OF THE REPORTING ELECTRIC TRANSMISSION OWNER OR EDU WITH REGARD TO ITS FORECAST DATABASE ARE AS FOLLOWS:

(a) THE ELECTRIC TRANSMISSION OWNER OR EDU SHALL PROVIDE OR CAUSE TO BE PROVIDED:

(i) A BRIEF DESCRIPTION OF ALL DATA SETS USED IN MAKING THE FORECAST, BOTH INTERNAL AND EXTERNAL, INPUT AND

OUTPUT, AND A CITATION TO THE SOURCES;

(ii) THE REASONS FOR THE SELECTION OF THE SPECIFIC DATA BASE USED; AND

(iii) A CLEAR IDENTIFICATION OF ANY SIGNIFICANT ADJUSTMENTS MADE TO RAW DATA IN ORDER TO ADAPT THEM FOR USE IN THE FORECAST, INCLUDING, TO THE EXTENT PRACTICABLE:

(a) THE NATURE OF THE ADJUSTMENT MADE,

(b) THE BASIS FOR THE ADJUSTMENT MADE, AND

(c) THE MAGNITUDE OF THE ADJUSTMENTS.

(b) IF A HEARING IS TO BE HELD ON THE FORECAST IN THE CURRENT FORECAST YEAR, THE REPORTING ELECTRIC TRANSMISSION OWNER OR EDU SHALL SUBMIT TO THE COMMISSION WITH ITS LONG-TERM FORECAST REPORT A DISKETTE OR OTHER MEDIUM THAT THE COMMISSION DEEMS ACCEPTABLE, CONTAINING ALL DATA SERIES, BOTH INPUT AND OUTPUT, RAW AND ADJUSTED, AND MODEL EQUATIONS USED IN THE PREPARATION OF THE FORECAST. THE COMMISSION MAY MAKE EXCEPTIONS TO PARAGRAPH (D)(3) OF THIS RULE FOR GOOD CAUSE.

(c) THE ELECTRIC TRANSMISSION OWNER OR EDU SHALL BE PREPARED TO PROVIDE TO THE COMMISSION, ON REQUEST:

(i) COPIES OF ALL DATA SETS USED IN MAKING THE FORECASTS, INCLUDING BOTH RAW AND ADJUSTED DATA, INPUT AND OUTPUT DATA, AND COMPLETE

DESCRIPTIONS OF ANY MATHEMATICAL, TECHNICAL, STATISTICAL, OR OTHER MODEL USED IN PREPARING THE DATA; AND

(ii) A NARRATIVE EXPLAINING THE DATA SETS AND ANY ADJUSTMENTS MADE WITH THE DATA TO ADAPT IT FOR USE IN THE FORECAST.

Replaces: former 4901:5-02

Effective:

Certification _____
Gary Vigorito, Secretary

_____
Date

Promulgated under R. C. Sec. 111.15
Authorized by R.C. Sec. 4935.01, 4935.02, 4935.04
Rule amplifies R.C. 4935.01, 4935.02, 4935.04
119.032 Review date: 11/30/00
Prior effective dates: 7/26/78; 4/2/83; 6/1/83; 7/2/84; 10/14/85; 11/20/87; 1/15/90; 3/24/97

4901:5-5-03 FORECASTS FOR ELECTRIC TRANSMISSION OWNERS.

(A) GENERAL GUIDELINES.

THE ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED DATA ON THE USE OF ITS TRANSMISSION LINES AND FACILITIES.

(1) THE FORECAST SHALL INCLUDE DATA ON ALL EXISTING AND PLANNED TRANSMISSION LINES AND ASSOCIATED FACILITIES OF ONE HUNDRED TWENTY-FIVE KILOVOLTS (KV) AND ABOVE AS WELL AS SUBSTANTIAL PLANNED ADDITIONS TO, AND REPLACEMENT OF, EXISTING FACILITIES, AS DEFINED BY THE COMMISSION, FOR YEAR ZERO TO YEAR TEN.

(2) THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL BE PREPARED TO SUPPLY TO THE COMMISSION ON DEMAND, ADDITIONAL DATA AND MAPS OF TRANSMISSION LINES AND FACILITIES.

(B) TRANSMISSION ENERGY DATA AND PEAK DEMAND FORECAST FORMS.

THE ELECTRIC TRANSMISSION OWNER'S FORECAST PRESENTATION SHALL INCLUDE THE FOLLOWING ELEMENTS PRESENTED ON THE INDICATED FORMS CONTAINED IN THE APPENDIX TO THIS RULE:

(1) ELECTRIC TRANSMISSION OWNERS SHALL FILE ENERGY DELIVERY FORECAST (MEGAWATT HOURS/YEAR) DATA: ACTUAL AND FORECAST AS SHOWN ON FORM FE3-T1 CONTAINED IN THE APPENDIX TO THIS RULE. THE ELECTRIC TRANSMISSION OWNER SHALL INDICATE THE TOTAL ENERGY IT RECEIVED FROM ALL GENERATING SOURCES CONNECTED TO THEIR TRANSMISSION SYSTEM WITHIN OHIO AS WELL AS THE TOTAL ENERGY RECEIVED FROM ALL GENERATING SOURCES CONNECTED TO THEIR SYSTEM. THEY SHALL INDICATE THE TOTAL ENERGY RECEIVE AT INTERCONNECTIONS WITH OTHER ELECTRIC TRANSMISSION OWNERS WITHIN OHIO AS WELL AS

THE TOTAL ENERGY RECEIVED FROM ALL ITS INTERCONNECTIONS. THE ELECTRIC TRANSMISSION OWNER SHALL REPORT THE TOTAL ENERGY DELIVERIES TO INTERCONNECTIONS WITHIN OHIO AS WELL AS TO ALL ITS INTERCONNECTIONS. THE ELECTRIC TRANSMISSION OWNER SHALL REPORT THE TOTAL ENERGY DELIVERIES FOR LOADS WITHIN OHIO AS WELL AS TO ALL LOAD DELIVERIES.

(2) ELECTRIC TRANSMISSION OWNERS SHALL FILE SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST: ACTUAL AND FORECAST SYSTEM PEAK DEMAND LEVELS FOR SUMMER AND WINTER SEASONS AS DISPLAYED ON FORM FE3-T2 CONTAINED IN THE APPENDIX TO THIS RULE, COVERING BOTH NATIVE AND INTERNAL LOADS, AS DEFINED IN THE FORM.

(3) MONTHLY DATA OF ENERGY AND PEAK LOADS. THE ELECTRIC TRANSMISSION OWNER SHALL SPECIFY IN DETAIL THE METHODOLOGY EMPLOYED TO PRODUCE MONTHLY FORECASTS OF ENERGY AND PEAK LOAD FOR THE CURRENT YEAR AND ONE YEAR IN THE FUTURE. THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED MONTHLY INFORMATION AS REQUIRED ON THE FOLLOWING FORMS:

(a) "TOTAL MONTHLY ENERGY FORECAST" FORECAST INFORMATION CONCERNING MONTHLY ENERGY FORECASTS SHALL BE PROVIDED FOR TWO YEARS ON FORM FE3-T3 CONTAINED IN THE APPENDIX TO THIS RULE.

(b) "MONTHLY INTERNAL PEAK LOAD FORECAST" FORECAST INFORMATION CONCERNING MONTHLY PEAK LOAD FORECASTS SHALL BE PROVIDED FOR TWO YEARS ON FORM FE3-T4 CONTAINED IN THE APPENDIX TO THIS RULE.

(c) “MONTHLY ENERGY TRANSACTION” THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED MONTHLY DATA ON ALL ENERGY RECEIVED

AND DELIVERED FOR THE TWELVE MONTHS OF THE MOST RECENT YEAR FOR WHICH ACTUAL DATA IS REPORTED ON THE FORMS FE3-T5 AND FE3-T6 CONTAINED IN THE APPENDIX TO THIS RULE:

(i) ON FORM FE3-T5 PART A, THE ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED MONTHLY DATA ON ALL ENERGY RECEIVED UNDER FIRM CONTRACT AND NONFIRM CONTRACT:

(a) FROM POWER PLANTS DIRECTLY CONNECTED TO THEIR TRANSMISSION SYSTEM;

(b) FROM OTHER SOURCES; AND

(c) THE TOTAL ENERGY RECEIVED FROM ALL SOURCES FOR THE MONTH.

(ii) ON FORM FE2-T5 PART B, THE ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED MONTHLY DATA ON ENERGY DELIVERED UNDER FIRM AND NONFIRM CONTRACT FOR THE TOTAL SYSTEM AND FOR DELIVERY POINTS LOCATED IN OHIO:

(a) THE AMOUNT OF POWER DELIVERED TO AFFILIATED EDUS;

(b) THE AMOUNT OF POWER DELIVERED TO OTHER NONAFFILIATED INVESTOR-OWNED EDUS;

(c) THE AMOUNT OF POWER DELIVERED TO COOPERATIVELY OWNED EDUS;

(d) THE AMOUNT OF POWER DELIVERED TO MUNICIPALLY OWNED EDUS;

(e) THE AMOUNT OF POWER DELIVERED TO FEDERAL AND STATE ELECTRIC AGENCIES;

(f) THE AMOUNT OF POWER DELIVERED FOR NONDISTRIBUTION SERVICE; AND

(g) THE TOTAL AMOUNT OF POWER DELIVERED.

(iii) ON FORM FE3-T5 PART C CONTAINED IN THE APPENDIX TO THIS RULE, THE ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED MONTHLY DATA ON SYSTEM LOSSES AND/OR UNACCOUNTED FOR ENERGY BY FIRM AND NONFIRM TRANSMISSION SERVICE.

(4) THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED DATA ON THE OPERATING CONDITIONS AT THE TIME OF THE MONTHLY PEAK FOR EACH MONTH DURING THE MOST RECENT YEAR FOR WHICH ACTUAL DATA IS SHOWN ON FORM FE3-T6 CONTAINED IN THE APPENDIX TO THIS RULE:

(a) THE PEAK DEMAND, DAY OF THE WEEK, DATE, AND HOUR OF PEAK;

(b) THE NUMBER OF REQUESTS FOR ATC;

(c) THE AMOUNT OF THE ATC REQUESTED IN MW;

(d) THE NUMBER OF ATC REQUESTS ACCEPTED;

(e) THE AMOUNT OF ATC ACCEPTED IN MW; AND

(f) THE AMOUNT OF ATC REQUEST NOT ACCEPTED (MW) AND THE REASON FOR NOT ACCEPTING.

(C) THE EXISTING TRANSMISSION SYSTEM.

(1) THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED A BRIEF NARRATIVE DESCRIPTION OF THE EXISTING ELECTRIC TRANSMISSION SYSTEM WHICH IS DETAILED IN FORMS FE3-T7 AND FE3-T8 CONTAINED IN THE APPENDIX TO THIS RULE AS FOLLOWS:

(a) A SUMMARY OF THE CHARACTERISTICS OF EXISTING TRANSMISSION LINES SHALL BE SHOWN AS INDICATED IN FORM FE3-T7, CHARACTERISTICS OF EXISTING TRANSMISSION LINES, CONTAINED IN THE APPENDIX TO THIS RULE.

(b) A SEPARATE LISTING OF SUBSTATIONS FOR EACH LINE INCLUDED IN FORM FE2-T7 SHALL BE SHOWN AS INDICATED IN FORM FE2-T8, SUMMARY OF EXISTING SUBSTATIONS, CONTAINED IN THE APPENDIX TO THIS RULE.

(2) EACH REPORTING ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED MAPS OF ITS ELECTRIC TRANSMISSION SYSTEM AS FOLLOWS:

(a) ONE SCHEMATIC MAP OF THE TRANSMISSION NETWORK;

(b) A MAP SHOWING THE ACTUAL, PHYSICAL ROUTING OF THE TRANSMISSION LINES, GEOGRAPHIC LANDMARKS, MAJOR METROPOLITAN AREAS, AND THE LOCATION OF SUBSTATIONS AND GENERATING PLANTS, INTERCONNECTS WITH DISTRIBUTION, INTERCONNECTIONS WITH OTHER ELECTRIC TRANSMISSION OWNERS; AND

(c) TWO COPIES OF THE MAP DESCRIBED IN PARAGRAPH (C)(2)(B) OF THIS RULE, FOR COMMISSION USE, ON A 1:250,000 SCALE. THE ELECTRIC TRANSMISSION OWNERS MAY JOINTLY PROVIDE ONE SET OF MAPS TO MEET THIS

REQUIREMENT. PARTICIPATION IN THE COMMISSION'S JOINT MAPPING PROJECT WILL MEET THIS REQUIREMENT.

(D) THE PLANNED TRANSMISSION SYSTEM.

THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL PROVIDE OR CAUSE TO BE PROVIDED A DESCRIPTION OF THE PLANS FOR DEVELOPMENT OF FACILITIES FOR YEARS ZERO THROUGH TEN AS FOLLOWS:

(1) SPECIFICATIONS OF PLANNED TRANSMISSION LINES SHALL BE PROVIDED ON FORM FE3-T9, SPECIFICATIONS OF PLANNED ELECTRIC TRANSMISSION LINES, CONTAINED IN THE APPENDIX TO THIS RULE FOR:

(a) NEW LINES REQUIRING NEW RIGHTS-OF-WAY;

(b) LINES IN WHICH CHANGES OF CAPACITY, EITHER IN TERMS OF CURRENT, VOLTAGE, OR BOTH, ARE SCHEDULED TO TAKE PLACE; AND

(c) OTHER CHANGES IN TRANSMISSION LINES OR RIGHTS-OF-WAY, WHICH WOULD BE CONSIDERED AS SUBSTANTIAL ADDITIONS, AS DEFINED IN RULE 4906-1-02 OF THE ADMINISTRATIVE CODE.

(2) A LISTING OF ALL PROPOSED SUBSTATIONS SHALL BE PROVIDED IN FORM FE3-T10, SUMMARY OF PROPOSED SUBSTATIONS, CONTAINED IN THE APPENDIX TO THIS RULE.

(3) THE TRANSMISSION FORECAST SHALL INCLUDE MAPS OF THE PLANNED TRANSMISSION SYSTEM AS FOLLOWS:

(a) AN OVERLAY TO EACH OF THE MAPS REQUIRED IN PARAGRAPH (C) OF THIS RULE SHOWING THE PLANNED TRANSMISSION LINES, SUBSTATION, AND GENERATING PLANTS AS THEY WILL TIE INTO THE EXISTING SYSTEM; PLANNED LINES

SHALL BE SHOWN AND IDENTIFIED AS SUCH AND KEYED INTO FORM FE3-T9 CONTAINED IN THE APPENDIX TO THIS RULE, TO PROVIDE AS COMPLETE A PICTURE OF THE SYSTEM AS IS POSSIBLE. COMBINED MAPS SHOWING BOTH EXISTING AND PROPOSED FACILITIES MAY BE SUBSTITUTED FOR THE OVERLAYS. WHERE PLANNING HORIZONS MAKE IT IMPRACTICAL TO COMPLY FULLY WITH THE DATA REQUIREMENTS OF THIS RULE, AS MANY DATA AS ARE AVAILABLE SHALL BE PROVIDED ALONG WITH THE ESTIMATED DATE ON WHICH ADDITIONAL DATA WILL BE AVAILABLE.

(b) TWO COPIES OF THE ABOVE OVERLAY, FOR COMMISSION USE, ON A SCALE OF 1:250,000. THE ELECTRIC TRANSMISSION OWNERS MAY JOINTLY PROVIDE ONE SET OF OVERLAYS TO MEET THIS REQUIREMENT. PARTICIPATION IN THE COMMISSION'S JOINT MAPPING PROJECT WILL MEET THIS REQUIREMENT.

(E) SUBSTANTIATION OF THE PLANNED TRANSMISSION SYSTEM.

THE REPORTING ELECTRIC TRANSMISSION OWNER SHALL SUBMIT A SUBSTANTIATION OF TRANSMISSION DEVELOPMENT PLANS, INCLUDING:

(1) DESCRIPTION AND TRANSCRIPTION DIAGRAMS OF THE BASE CASE LOAD FLOW STUDIES OF THE TRANSMISSION OWNER’S TRANSMISSION SYSTEM IN OHIO, ONE FOR THE CURRENT YEAR AND ONE AS PROJECTED EITHER THREE OR FIVE YEARS INTO THE FUTURE, AND PROVIDE BASE CASE LOAD FLOW STUDIES ON COMPUTER DISKS IN PSSE OR PSLF FORMAT ALONG WITH TRANSCRIPTION DIAGRAMS FOR THE BASE CASES;

(2) A TABULATION OF AND TRANSCRIPTION DIAGRAMS FOR A REPRESENTATIVE NUMBER OF CONTINGENCY CASES STUDIED ALONG WITH A BRIEF STATEMENTS CONCERNING THE RESULTS;

(3) ANALYSIS OF PROPOSED SOLUTIONS TO PROBLEMS IDENTIFIED IN PARAGRAPH (E)(2) OF THIS RULE;

(4) ADEQUACY OF THE ELECTRIC TRANSMISSION OWNER'S TRANSMISSION SYSTEM TO WITHSTAND NATURAL DISASTERS AND OVERLOAD CONDITIONS;

(5) ANALYSIS OF THE ELECTRIC TRANSMISSION OWNER'S TRANSMISSION SYSTEM TO PERMIT POWER INTERCHANGE WITH NEIGHBORING SYSTEMS;

(6) A DIAGRAM SHOWING THE ELECTRIC TRANSMISSION OWNER'S IMPORT AND EXPORT TRANSFER CAPABILITIES AND IDENTIFYING THE LIMITING ELEMENT(S) DURING EACH SEASON OF THE REPORTING PERIOD. IN ADDITION, THE REPORTING ELECTRIC TRANSMISSION OWNER WILL PROVIDE A LISTING OF TRANSMISSION LOADING RELIEF (TLR) PROCEDURES CALLED DURING THE LAST TWO SEASONS FOR WHICH ACTUAL DATA ARE AVAILABLE. THAT LISTING MAY INCLUDE ONLY THOSE TLRS CALLED AS A RESULT OF A TRANSMISSION LIMIT ON THE REPORTING ELECTRIC TRANSMISSION OWNER'S TRANSMISSION SYSTEM. FOR EACH TLR EVENT, THE LISTING SHALL INCLUDE THE MAXIMUM LEVEL, AND THE DURATION AT THE MAXIMUM LEVEL, AND THE MAGNITUDE (IN MW) OF THE POWER CURTAILMENTS;

(7) A DESCRIPTION OF ANY STUDIES REGARDING TRANSMISSION SYSTEM IMPROVEMENT, INCLUDING ANY STUDIES OF THE POTENTIAL FOR REDUCING LINE LOSSES, THERMAL LOADING, AND LOW VOLTAGE; AND

(8) A SWITCHING DIAGRAM OF THE TRANSMISSION NETWORK.

(F) REGIONAL AND BULK POWER REQUIREMENTS.

TO AVOID THE INEFFICIENCIES ASSOCIATED WITH HAVING EACH ELECTRIC TRANSMISSION OWNER REPORT THIS

DATA, THE ELECTRIC TRANSMISSION OWNERS MAY HAVE ECAR OR A SUCCESSOR ORGANIZATION SUBMIT A SINGLE REPORT ON THEIR BEHALF. THIS INFORMATION SHALL BE PROVIDED AS SOON AS IT BECOMES AVAILABLE. DATA PROVIDED TO THE COMMISSION CONCERNING THE ELECTRIC TRANSMISSION OWNER'S EXISTING AND PLANNED BULK POWER TRANSMISSION SYSTEM (TWO HUNDRED THIRTY KV AND ABOVE) SHALL INCLUDE THE FOLLOWING:

(1) THE MOST RECENT REGIONAL POWER SUPPLY FACILITIES EXISTING AND AN AUTHORIZED MAP;

(2) A PLAN OF THE BULK POWER TRANSMISSION NETWORK OF THE REGION IN SERVICE (TOTAL SERVICE AREA OF THE COMPANIES IN THE REGION INCLUDING OUT-OF-STATE SERVICE AREAS) AT THE TIME OF THE REPORT, INCLUDING INTERFACES WITH ADJOINING REGIONS;

(3) REGIONAL TRANSMISSION SYSTEM POWER INTERCHANGE MATRIX;

(4) A DESCRIPTION AND PLOT OF THE BASE CASE FOR LOAD FLOW STUDIES OF THE BULK POWER NETWORK OF THE REGION AS IT NOW EXISTS, SUBSTANTIALLY AT THE TIME OF REPORTING, AND A LIST OF SIGNIFICANT CONTINGENCY CASES;

(5) A PLAN OF THE BULK POWER TRANSMISSION NETWORK OF THE REGION (INCLUDING INTERTIES WITH ADJOINING REGIONS) AND THE GENERAL ROUTING OF FACILITIES COMMITTED OR TENTATIVELY PROJECTED FOR SERVICE WITHIN TEN YEARS, INCLUDING IDENTIFICATION OF PRINCIPAL SUBSTATIONS, OPERATING VOLTAGES, AND PROJECTED IN-SERVICE DATES; AND

(6) INFORMATION ON RELIABILITY ANALYSIS OF THE NETWORK, INCLUDING THE CRITERIA ADOPTED BY THE REGIONAL COUNCIL RELATING TO NETWORK RELIABILITY.

PUCO FORM FE3-T1: TRANSMISSION ENERGY DELIVERY FORECAST (Megawatt Hours/Year) (a)

	YEAR	(1) ENERGY RECEIPTS FROM GENERATION SOURCES CONNECTED TO THE OWNER'S SYSTEM INSIDE OHIO	(2) ENERGY RECEIPTS FROM GENERATION SOURCES CONNECTED TO THE SYSTEM OUTSIDE OHIO	(3) TOTAL ENERGY RECEIPTS FROM GENERATION SOURCES 1 + 2	(4) ENERGY RECEIPTS AT INTERCONNECTIONS WITH OTHER TRANSMISSION COMPANIES INSIDE OHIO	(5) ENERGY RECEIPTS AT INTERCONNECTIONS WITH OTHER TRANSMISSION COMPANIES OUTSIDE OHIO	(6) TOTAL ENERGY RECEIPTS AT INTERCONNECTIONS 4 + 5	(7) TOTAL ENERGY RECEIPTS 3 + 6	(8) ENERGY DELIVERIES AT INTERCONNECTIONS WITH OTHER TRANSMISSION COMPANIES INSIDE OHIO	(9) ENERGY DELIVERIES AT INTERCONNECTIONS WITH OTHER TRANSMISSION COMPANIES OUTSIDE OHIO	(10) TOTAL ENERGY DELIVERIES AT INTERCONNECTIONS 8+9	(11) TOTAL ENERGY DELIVERIES FOR LOAD CONNECTED TO THE SYSTEM 7-10	(12) ENERGY DELIVERIES FOR LOADS CONNECTED TO THE SYSTEM INSIDE OHIO	(13) ENERGY DELIVERIES FOR LOADS CONNECTED TO THE SYSTEM OUTSIDE OHIO 11-12
-5														
-4														
-3														
-2														
-1														
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														

(a) To be filled out by electric transmission owners operating in Ohio.

Appendix

PUCO FORM FE3-T2: ELECTRIC TRANSMISSION OWNER'S SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST (Megawatts)(a)

	NATIVE LOAD (b)		INTERNAL LOAD (c)	
	Load		Load	
Year	Summer	Winter(d)	Summer	Winter(d)
-5				
-4				
-3				
-2				
-1				
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

(a) To be filled out by electric transmission owners operating in Ohio.
(b) Excludes interruptible load.
(c) Includes interruptible load
(d) Winter load reference is to peak loads which follow the summer peak load.

Appendix

PUCO FORM FE3-T3: ELECTRIC TRANSMISSION OWNER'S TOTAL MONTHLY ENERGY FORECAST (MWh)

YEAR 0 (d)	OHIO PORTION (a)	TOTAL SERVICE AREA (b)	TOTAL SYSTEM (c)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
YEAR 1 (d)			
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Total			

(a) Electric transmission owner shall provide or cause to be provided data for the Ohio portion of its service area in this column.
(b) Electric transmission owner operating across Ohio boundaries shall provide or cause to be provided data for the total service area in this column:
(c) Electric transmission owner operating as a part of an integrated operating system shall provide data for the total system in this column.
(d) Actual data shall be indicated with an asterisk (*).

Appendix

PUCO FORM FE3-T4: ELECTRIC TRANSMISSION OWNER'S MONTHLY INTERNAL PEAK LOAD FORECAST (Megawatts)

YEAR 0(d)	OHIO PORTION (a)	TOTAL COMPANY (b)	TOTAL SYSTEM (c)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

YEAR1 (d)			
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

(a) Electric transmission owner shall provide or cause to be provided data for the Ohio portion of its service area in this column.
(b) Electric transmission owner operating across Ohio boundaries shall provide or cause to be provided data for the total service area in this column:
(c) Electric transmission owner operating as a part of an integrated operating system shall provide data for the total system in this column.
(d) Actual data shall be indicated with an asterisk (*).

Appendix

FORM FE3-T5 MONTHLY ENERGY TRANSACTIONS (TOTAL MWH/MONTH) FOR THE MOST RECENT YEAR

PART A: SOURCES OF ENERGY

Reporting Month _____

1. Energy Receipts from all sources by type: (MWH)

	Firm Transmission Service	Non-Firm Transmission Service	Total
Energy Receipts from Power Plants directly connected to the Electric Transmission Owner's transmission system			
Energy Receipts from other sources			
Total Energy Receipts			

Appendix

FORM FE3-T5 MONTHLY ENERGY TRANSACTIONS (TOTAL MWH/MONTH) FOR THE MOST RECENT YEAR

PART B: DELIVERY OF ENERGY

Reporting Month _____

1. Energy deliveries to all points connected to the Electric Transmission Owner's system (MWH)

	Firm Transmission Service	Non-Firm Transmission Service	Total
For Distribution service:			
Affiliated Electric Utility Companies			
Other Investor-Owned Electric Utilities			
Cooperative-Owned Electric System			
Municipal-Owned Electric Systems			
Federal and State Electric Agencies			
Other end user service			
For Non Distribution service (transmission to transmission service)			
Total Energy Delivery			

Reporting Month _____

2. Energy deliveries to all points connected to the Electric Transmission Owner's system located in Ohio (MWH)

	Firm Transmission Service	Non-Firm Transmission Service	Total
For Distribution service:			
Affiliated Electric Utility Companies			
Other Investor-Owned Electric Utilities			
Cooperatively-Owned Electric System			
Municipally-Owned Electric Systems			
Federal and State Electric Agencies			
Other end user service			
For Non Distribution service (transmission to transmission service)			
Total Energy Delivery			

Appendix

FORM FE3-T5 MONTHLY ENERGY TRANSACTIONS (TOTAL MWH/MONTH) FOR THE MOST RECENT YEAR

Reporting Month _____

PART C: LOSSES AND UNACCOUNTED FOR (MWH)

	Firm Transmission Service	Non-Firm Transmission Service	Total
Sources minus Delivery (a)			

(a) FE2-T5: Part A minus Part B (1)

Appendix

FORM FE3-T6: CONDITIONS AT TIME OF MONTHLY PEAK

Reporting Month _____

Megawatts		Day of Week		Day of Month		Hour of Peak	
CURTAILMENT PRIORITY CLASSES				Firm Transmission Service	Non-Firm Transmission Service	Total	
Number of Requests for ATC							
Requests for ATC (MW)							
Number of ATC requests accepted							
ATC requests accepted (MW)							
							Reason for non-delivery
ATC requests not accepted (MW) and reason for not accepting delivery							

4901:5-5-03 Appendix

PUCO FORM FE3-T7: CHARACTERISTICS OF TRANSMISSION OWNER'S EXISTING TRANSMISSION LINES

Transmission Line Name and Number. (a)	Point of Origin and Terminus	Summer Capability (MVA)		Winter Capability (MVA)		Operating Voltage (kV)	Design Voltage (kV)	Right-of-Way		Type of Supporting Structure	Number of Circuits		Substations On the Line
List each Transmission Line of 125 kV Or more.	Indicate location of line's beginning and terminus.	Normal Rating	Emergency Rating	Normal Rating	Emergency Rating	Indicate design voltage and operating voltage for each line.		Length (Miles)	Width (Feet)	Steel towers, Wood poles, or Underground, Etc. and number Of miles of the Line of each Structure.	Design	Installed	Substation Name

(a) Indicate with * if transmission line is an interconnection with another electric transmission owner and list the other transmission owner's name.

Appendix

PUCO FORM FE3-T8: SUMMARY OF EXISTING SUBSTATIONS ON TRANSMISSION LINES

Substation Name	Type Distribution (D) Transmission (T)	Voltage(s)	Line Association(s) (FE3-T7 or FE3-T9 Notation)	Line Existing or Proposed

Appendix

PUCO FORM FE3-T9: SPECIFICATIONS OF PLANNED ELECTRIC TRANSMISSION LINES

1.	Line Name and Number	Indicate planned line name and number
2.	Point of Origin Terminus	Specify planned points of line origin and termination.
3.	Right of Way	Specify right-of-way length, average width, and number of transmission lines above 125 kV.
4.	Voltage	Specify planned design and operate voltage.
5.	Application for Certificate	Indicate the probable date for filing an application for a certificate, to the extent possible.
6.	Construction	Specify planned construction commencement, and anticipated date of commercial operation.
7.	Capital Investment	Provide preliminary initial estimates of capital investment including land acquisitions, right-of-way improvements, and facilities and equipment costs, as available at the time of reporting.
8.	Substations	Specify number of tentative location and names of planned substations, transmission voltages, and average acreage required.
9.	Supporting Structures	Indicate preliminary structure type(s).
10.	Participation with other Utilities	Specify the nature of participation with other utilities, if applicable.
11.	Purpose of the Planned Transmission Line	Indicate the preliminary purpose of the planned line (e.g., system reliability, connection of generating facilities, load center growth, etc.).
12.	Consequences of Line Construction deferment or Termination	Briefly describe the consequences of delay.
13.	Miscellaneous	Waivers to be requested, date of pre-application conference(optional), area to be served, and other significant information.

Appendix

PUCO FORM FE3-T10: SUMMARY OF PROPOSED SUBSTATIONS

Substation Name:

Voltage(s):

Type of Substation
Distribution (D)
Transmission (T)

Timing:

Line Association(s):
Existing or
Proposed:

Minimum Substation Site Acreage:

Replaces: part of 4901:5-5-04
former 4901:5-5-03

Effective:

Certification _____
Gary Vigorito, Secretary

_____
Date

Promulgated under R. C. Sec. 111.15
Authorized by R.C. Sec. 4935.01, 4935.02, 4935.04
Rule amplifies R.C. 4935.01, 4935.02, 4935.04
119.032 Review date: 11/30/00
Prior effective dates: (4901:5-5-04) 11/20/87, 1/15/90)
(4901:5-5-03) 11/20/87, 1/15/90, 8/17/90

4901:5-5-04 FORECASTS FOR ELECTRIC DISTRIBUTION UTILITIES (EDUS).

(A) GENERAL GUIDELINES.

(1) THE REPORTING EDU SHALL PROVIDE OR CAUSE TO BE PROVIDED DATA ON THE USE OF ITS DISTRIBUTION LINES AND FACILITIES.

(2) THE EDU SHALL SPECIFY IN DETAIL THE METHODOLOGY EMPLOYED TO PRODUCE MONTHLY FORECASTS OF ENERGY AND PEAK LOAD FOR THE CURRENT YEAR AND ONE YEAR IN THE FUTURE.

(3) THE REPORTING EDU SHALL BE PREPARED TO SUPPLY TO THE COMMISSION ON DEMAND, ADDITIONAL DATA AND MAPS OF DISTRIBUTION LINES AND FACILITIES.

(B) DISTRIBUTION ENERGY DATA AND PEAK DEMAND FORECAST FORMS.

THE DISTRIBUTION FORECAST PRESENTATION SHALL INCLUDE THE FOLLOWING ELEMENTS PRESENTED ON THE INDICATED FORMS CONTAINED IN THE APPENDIX TO THIS RULE:

(1) EDUS SHALL FILE A SERVICE AREA ENERGY FORECAST (MEGAWATT HOURS/YEAR). EDUS THAT OPERATE IN OHIO SHALL FURNISH COMPLETED SETS OF FE4-D1, FE4-D2 AND FE4-D3 CONTAINED IN THE APPENDIX TO THIS RULE, AS FOLLOWS:

(a) FE4-D1 SHALL CONTAIN DATA FOR ONLY THE OHIO PORTION OF THE REPORTING EDU'S TOTAL SERVICE AREA;

(b) FE4-D2 SHALL CONTAIN DATA FOR THE REPORTING EDU'S TOTAL SERVICE AREA; AND

(c) EDUS THAT ARE MEMBERS OF AN INTEGRATED OPERATING SYSTEM AND OPERATED ON A

SYSTEM BASIS SHALL ALSO FILE FE4-D3 FOR THE INTEGRATED SYSTEM.

(2) EDUS SHALL FILE A SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST: ACTUAL AND FORECAST SYSTEM PEAK DEMAND LEVELS FOR SUMMER AND WINTER SEASONS AS DISPLAYED ON FORMS FE4-D4, FE4-D5, AND FE4-D6 CONTAINED IN THE APPENDIX TO THIS RULE, AS FOLLOWS:

(a) FE4-D4 SHALL CONTAIN DATA FOR ONLY THE OHIO PORTION OF THE REPORTING EDU'S TOTAL SERVICE AREA;

(b) FE4-D5 SHALL CONTAIN DATA FOR THE REPORTING EDU'S TOTAL SERVICE AREA; AND

(c) EDUS THAT ARE MEMBERS OF AN INTEGRATED OPERATING SYSTEM AND OPERATED ON A SYSTEM BASIS SHALL ALSO FILE FORM FE4-D6 FOR THE INTEGRATED SYSTEM.

(3) MONTHLY FORECASTS OF ENERGY AND PEAK LOADS.

THE EDU SHALL SPECIFY IN DETAIL THE METHODOLOGY EMPLOYED TO PRODUCE MONTHLY FORECASTS OF ENERGY AND PEAK LOAD FOR THE CURRENT YEAR AND ONE YEAR IN THE FUTURE. THE REPORTING EDU SHALL PROVIDE OR CAUSE TO BE PROVIDED MONTHLY INFORMATION AS REQUIRED ON THE FOLLOWING FORMS:

(a) FROM FE4-D7, TOTAL MONTHLY ENERGY FORECAST, CONTAINED IN THE APPENDIX TO THIS RULE.

(b) FORM FE4-D8, MONTHLY INTERNAL PEAK LOAD FORECAST, CONTAINED IN THE APPENDIX TO THIS RULE.

(C) SUBSTANTIATION OF THE PLANNED DISTRIBUTION SYSTEM.

THE REPORTING EDU SHALL SUBMIT A SUBSTANTIATION OF DISTRIBUTION DEVELOPMENT PLANS, INCLUDING:

(1) LOAD FLOW OR OTHER SYSTEM ANALYSIS BY VOLTAGE CLASS OF THE EDU'S DISTRIBUTION SYSTEM PERFORMANCE IN OHIO, THAT IDENTIFIES AND CONSIDERS EACH OF THE FOLLOWING:

(a) ANY THERMAL OVERLOADING OF DISTRIBUTION CIRCUITS AND EQUIPMENT; AND

(b) ANY VOLTAGE VARIATIONS ON DISTRIBUTION CIRCUITS THAT DO NOT COMPLY WITH THE CURRENT VERSION OF THE AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) STANDARD C84.1, ELECTRIC POWER SYSTEMS AND EQUIPMENT VOLTAGE RATINGS OR STANDARD AS LATER AMENDED.

(2) ANALYSIS AND CONSIDERATION OF PROPOSED SOLUTIONS TO PROBLEMS IDENTIFIED IN (C)(1) OF THIS RULE;

(3) ADEQUACY OF THE EDU DISTRIBUTION SYSTEM TO WITHSTAND NATURAL DISASTERS AND OVERLOAD CONDITIONS;

(4) ANALYSIS AND CONSIDERATION OF ANY STUDIES REGARDING DISTRIBUTION SYSTEM IMPROVEMENT, INCLUDING ANY STUDIES OF THE POTENTIAL FOR REDUCING LINE LOSSES, THERMAL LOADING AND LOW VOLTAGE OR ANY OTHER PROBLEMS; AND

(5) A SWITCHING DIAGRAM OF CIRCUITS LESS THAN ONE HUNDRED TWENTY-FIVE KV THAT ARE NOT RADIAL.

PUCO FORM FE4-D1: EDU SERVICE AREA ENERGY DELIVERY FORECAST (Megawatt Hours/Year) (a)

	YEAR	(1) RESIDENTIAL	(2) COMMERCIAL	(3) INDUSTRIAL	(4) RAILWAYS AND RAILROADS	(5) OTHER (b)	(6) TOTAL END USE DELIVERY 1+2+3+4+5	(7) Line Losses And Company Use	(8) TOTAL ENERGY 6 + 7
-5									
-4									
-3									
-2									
-1									
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

(a) To be filled out by all EDUs. The category breakdown should refer to the Ohio portion of the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

PUCO FORM FE4-D2: EDU SERVICE AREA ENERGY DELIVERY FORECAST (Megawatt Hours/Year) (a)

	YEAR	(1) RESIDENTIAL	(2) COMMERCIAL	(3) INDUSTRIAL	(4) RAILWAYS AND RAILROADS	(5) OTHER (b)	(6) TOTAL END USE DELIVERY 1+2+3+4+5	(7) Line Losses And Company Use	(8) TOTAL ENERGY 6 + 7
-5									
-4									
-3									
-2									
-1									
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

(a) To be filled out by EDUs operating across Ohio boundaries. The category breakdown should refer to the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

PUCO FORM FE4-D3: EDU SERVICE AREA ENERGY DELIVERY FORECAST (Megawatt Hours/Year) (a)

	YEAR	(1) RESIDENTIAL	(2) COMMERCIAL	(3) INDUSTRIAL	(4) RAILWAYS AND RAILROADS	(5) OTHER (b)	(6) TOTAL END USE DELIVERY 1+2+3+4+5	(7) Line Losses And Company Use	(8) TOTAL ENERGY 6 + 7
-5									
-4									
-3									
-2									
-1									
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

(a) To be filled out by EDUs which are members of an integrated operating system spanning state boundaries. The category breakdown should refer to the total system.

(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

Appendix

PUCO FORM FE4-D4: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST (Megawatts)(a)

Year	Summer	Winter(b)
-5		
-4		
-3		
-2		
-1		
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service are.

(b) Winter load reference is to peak loads which follow the summer peak load.

Appendix

PUCO FORM FE4-D5: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST (Megawatts)(a)

Year	Summer	Winter(b)
-5		
-4		
-3		
-2		
-1		
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

(a) To be filled out by EDUs operating across Ohio boundaries. Data should refer to the EDU's total service area.

(b) Winter load reference is to peak loads which follow the summer peak load.

Appendix

PUCO FORM FE4-D6: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST (Megawatts)(a)

Year	Summer	Winter(b)
-5		
-4		
-3		
-2		
-1		
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

(a) To be filled out by EDUs which are members of an integrated operating system spanning state boundaries. Data should refer to the total system.

(b) Winter load reference is to peak loads which follow the summer peak load.

Appendix

PUCO FORM FE4-D7: EDU's TOTAL MONTHLY ENERGY FORECAST (MWh)

YEAR 0 (d)	OHIO PORTION (a)	TOTAL SERVICE AREA (b)	TOTAL SYSTEM (c)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
YEAR 1 (d)			
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Total			

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.
(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column:
(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.
(d) Actual data shall be indicated with an asterisk (*).

Appendix

PUCO FORM FE4-D8: EDU'S MONTHLY INTERNAL PEAK LOAD FORECAST (Megawatts)

YEAR 0(d)	OHIO PORTION (a)	TOTAL SERVICE AREA (b)	TOTAL SYSTEM (c)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

YEAR1 (d)			
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.
(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column:
(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.
(d) Actual data shall be indicated with an asterisk (*).

Replaces: former 4901:5-5-05
former 4901:5-5-06

Effective:

Certification _____
Gary Vigorito, Secretary

_____
Date

Promulgated under R. C. Sec. 111.15
Authorized by R.C. Sec. 4935.01, 4935.02, 4935.04
Rule amplifies R.C. 4935.01, 4935.02, 4935.04
119.032 Review date: 11/30/00
Prior effective dates: (4901:5-5-05) 11/20/87, 1/15/90, 8/17/90, 3/24/97
(4901:5-5-06) (1/15/90, 3/24/97)