Decision No. C09-1405

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 09R-904E

IN THE MATTER OF THE PROPOSED RULES RELATED TO CONSTRUCTION OR EXTENSION OF ELECTRIC TRANSMISSION FACILITIES, 4 CODE OF COLORADO REGULATIONS 723-3.

NOTICE OF PROPOSED RULEMAKING

Mailed Date: December 17, 2009 Adopted Date: December 16, 2009

I. <u>BY THE COMMISSION</u>

A. Statement

1. The Colorado Public Utilities Commission (Commission) hereby issues a Notice

of Proposed Rulemaking (NOPR) regarding its Rules Regulating Electric Utilities, 4 Code of

Colorado Regulations (CCR) 723-3.

2. The basis and purpose of the proposed amendments is to revise the current rules

related to Construction or extension of electric facilities.

3. The statutory authority for the proposed rules is found in §§ 29-20-108, 40-2-108,

40-2-124, 40-2-126, 40-3-102, 40-3-103, 40-3-111, 40-3-114, 40-4-101, 40-4-106, 40-4-108, 40-4-10

5-101, 40-5-103, and 40-9.5-107, C.R.S.

4. The Commission opened an investigatory docket, Docket No. 08I-227E in order

to consider issues related to electric transmission and to identify transmission planning activities

that merit more active involvement by the Commission. The Commission held four workshops

and solicited comments during the pendency of this investigation. In addition, many utilities,

associations, individuals, and agencies offered valuable information into the record.

- 5. In Decision No. C09-1097, mailed October 8, 2009 (Order Closing Investigatory Docket), the Commission announced its intent to issue a notice of proposed rulemaking focusing on the Certificate of Public Convenience and Necessity (CPCN) process for electric transmission facilities and how it can be improved. The Commission stated that it will endeavor to define more clearly the concept of "in ordinary course of business" when a CPCN application is not needed; and, in those situations where a CPCN application is required, to set default levels of EMF and corona noise to expedite proceedings where these default levels are met.
  - 6. The Commission intends this NOPR to accomplish the above mentioned goals.
- 7. Proposed Rule 3206(b) provides that all transmission projects designed at 230kV and above will require a certificate of public convenience and necessity (CPCN), even if these projects will be initially operated at a lower voltage. On the other hand, all transmission projects designed at below 230 kV will be exempted from the CPCN process *if* they meet the noise and EMF guidelines and have no unusual system impact or expense. The projects not requiring a CPCN pursuant to proposed Rule 3206(b) will be deemed in the ordinary course of business pursuant to § 40-5-101, C.R.S.
- 8. Proposed Rule 3206(c) discusses which modifications to existing transmission facilities are not in the ordinary course of business and therefore require a CPCN.
- 9. Proposed Rule 3206(d) generally states that all electric utilities and cooperative electric associations will be required to file with the Commission its proposed new construction or extension of transmission facilities no later than April 30 of each year. Rule 3206(e) further discusses the required contents of such filings.
- 10. The annual report discussed in Rule 3206(d) may request a determination from the Commission that a 115 kV project does not need a certificate of public convenience and

necessity. In that event, the report must include sufficient information to demonstrate that the project meets the EMF and noise thresholds, and is consistent with the long range plan. In any event, requests for a certificate for public convenience and necessity can be made for any project, regardless of voltage, at any time. Such requests need not be made coincident with the filing of the annual report discussed in Rule 3206(d).

- 11. Proposed Rule 3206(f) provides that an EMF level of 150 mG (milliGauss) and below will not be subject to further review and will not need to be mitigated to a lower level. Proposed Rule 3206(f) also states that if the projected EMF level is above 150 mG, the utility must present a range of alternatives and associated costs that would reduce the EMF level to 150 mG or, if the EMF level cannot be reduced to 150 mG, then the utility must present range of alternatives and associated costs that reduce the EMF level to the lowest possible level.
- Proposed Rule 3206(g) provides that the level of noise at or below the applicable presumptive levels set in § 25-12-101(1), C.R.S., will not be subject to further review and need not be mitigated to a lower level. Proposed Rule 3206(f) also states that if the projected noise level is above the applicable presumptive levels set in § 25-12-101(1), C.R.S., then the utility must present a range of alternatives and associated costs that would reduce the noise level to the applicable presumptive levels set in § 25-12-101(1), C.R.S. If the noise level cannot be reduced to the applicable presumptive levels set in § 25-12-101(1), C.R.S., then the utility must present range of alternatives and associated costs that reduce the noise level to the lowest possible level.
- 13. Proposed Rule 3206(h) discusses the requirement that the utility explain how the proposed transmission project is compatible with the conceptual long term needs of the utility's transmission system.

- 14. Proposed Rule 3206(i) discusses certain procedural timelines pertaining to these filings. In this rulemaking proceeding, the Commission desires to explore potential procedural timelines for issuing final Commission decision(s) on the issues of need, noise, and EMF levels under both §§ 40-6-109.5 and 40-2-126, C.R.S. The Commission invites interested parties to comment on whether the new rules should shorten notice and intervention periods and whether certain pre-filing requirements would facilitate more prompt Commission decision(s), among other topics.
- 15. Rules not specifically discussed in this NOPR do not constitute a portion of this NOPR. The Commission is not proposing any changes to the rules not specifically discussed in this NOPR.
- 16. The proposed amendments will be published in the January 10, 2009, edition of *The Colorado Register*. Additionally, interested persons may acquire a copy of the proposed amendments, either in hard-copy or electronic form, from the Commission's Records Management Unit. The Records Management Unit may be contacted by phone or email at 303.894.2040 or Cheryl.Fisher@dora.state.co.us, respectively. The proposed amendments will also be available on the Commission's website:

#### www.dora.state.co.us/puc/rulemaking/RulemakingNotices.htm

- 17. Considering the scope of this NOPR, the Commission requests that interested persons limit their comments to the proposed rule changes only. The instant rulemaking should not be construed as an opportunity to reopen issues resolved in preceding rulemakings.
- 18. Hearing Commissioner James Tarpey will conduct a hearing on the proposed rule amendments and related issues at the below-stated time and place. Interested persons may also submit written comments on the amendments, including data, views, or arguments, and present

these orally at hearing unless the Hearing Commissioner deems oral presentations unnecessary.

The Commission encourages interested persons to submit written comments before the hearing

scheduled in this matter. If interested persons wish to file comments before the hearing, the

Commission requests that such comments be filed no later than February 1, 2010.

Reply comments should be submitted by February 16, 2010. The Commission prefers that

interested persons submit their comments both in paper and, when possible, electronic format.

The Commission may post electronically submitted comments to its website. The Commission

will consider all submissions, whether oral or written.

II. ORDER

**A.** The Commission Orders That:

1. This Notice of Proposed Rulemaking shall be filed with the Colorado Secretary of

State for publication in the January 10, 2009, edition of *The Colorado Register*.

2. A Hearing on the proposed rules and related matters shall be held before Hearing

Commissioner James Tarpey as follows:

DATE: February 23, 2010

TIME: 9:00 A.M.

PLACE: Commission Hearing Room A

1560 Broadway, Suite 250

Denver, Colorado

3. The Hearing Commissioner may set additional hearings, if necessary.

4. At the time set for hearing in this matter, interested persons may submit written

comments and may present these orally unless the Hearing Commissioner finds oral comments

are unnecessary. Interested persons may file written comments in this matter before hearing.

The Commission prefers that such pre-filed comments be submitted in both paper and, when

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possible, electronic format no later than February 1, 2010. Reply comments should be submitted by February 16, 2010.

- This Order is effective upon its Mailed Date. 5.
- B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING December 16, 2009.



ATTEST: A TRUE COPY

Doug Dean, Director

THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

RONALD J. BINZ

JAMES K. TARPEY

MATT BAKER

Commissioners

### COLORADO DEPARTMENT OF REGULATORY AGENCIES

## **Public Utilities Commission**

## 4 CODE OF COLORADO REGULATIONS (CCR) 723-3

# PART 3 RULES REGULATING ELECTRIC UTILITIES

[indicates omission of unaffected rules]

#### 3102. Certificate of Public Convenience and Necessity for Facilities.

- (a) A utility seeking authority to construct and to operate a facility or an extension of a facility pursuant to § 40-5-101, C.R.S., shall file an application pursuant to this rule.
  - (I) If the facility is not a transmission facility, The utility need not apply to the Commission for approval of construction and operation of thea facility or an extension of thea facility which is in the ordinary course of business. The utility shall apply to the Commission for approval of construction and operation of a facility or an extension of a facility which is not in the ordinary course of business.
  - (II) If the facility is a transmission facility, in addition to the requirements in paragraph (b) of this rule, the utility shall comply with rule 3206.
- (b) An application for certificate of public convenience and necessity to construct and to operate facilities or an extension of a facility pursuant to § 40-5-101, C.R.S., shall include, in the following order and specifically identified, the following information, either in the application or in appropriately identified attached exhibits:
  - (I) The information required in <u>paragraphs</u>rules 3002(b) and 3002(c).
  - (II) A statement of the facts (not conclusory statements) relied upon by the applying utility to show that the public convenience and necessity require the granting of the application or citation to any Commission decision that is relevant to the proposed facilities.
  - (III) A description of the proposed facilities to be constructed.
  - (IV) Estimated cost of the proposed facilities to be constructed.
  - (V) Anticipated construction start date, construction period, and in-service date.
  - (VI) A map showing the general area or actual locations where facilities will be constructed, population centers, major highways, and county and state boundaries.
  - (VII) As applicable, electric one-line diagrams.

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- (VIII) As applicable, information on alternatives studied, costs for those alternatives, and criteria used to rank or eliminate alternatives.
- (IX) As applicable, a report of prudent avoidance measures considered and justification for the measures selected to be implemented.
- (X) For transmission construction or extension, the information required by paragraph (c) of this rule.
- (X) For construction or extension of transmission facilities, the technical analyses performed for the selection of the proposed project, and alternatives.(c)—For an application for a certificate of public convenience and necessity for construction or extension of transmission facilities, the applying utility shall describe its actions and techniques relating to cost-effective noise mitigation with respect to the planning, siting, construction, and operation of the proposed transmission construction or extension. The applying utility shall provide computer studies which show the potential noise levels expressed in db(A) and measured at the edge of the transmission line right of way. These computer studies shall be the output of utility standard programs, such as EPRI's EMF Workstation 2.51 ENVIRO Program—Bonneville Power Administration model. The steps and techniques may include, without limitation, the following:
- (I) Bundled conductors.
- (II) Larger conductors.
- (III) Design alternatives considering the spatial arrangement of phasing of conductors.
- (IV) Corona-free attachment hardware.
- (V) Conductor quality.
- (VI) Handling and packaging of conductor.
- (VII) Construction techniques.
- (VIII) Line tension.
- (d) For an application for a certificate of public convenience and necessity for construction or extension of transmission facilities, the applying utility shall describe its actions and techniques relating to prudent avoidance with respect to planning, siting, construction, and operation of the proposed construction or extension. As used in this paragraph, "prudent avoidance" means the striking of a reasonable balance between the potential health effects of exposure to magnetic fields and the cost and impacts of mitigation of such exposure, by taking steps to reduce the exposure at reasonable or modest cost. The steps and techniques may include, without limitation, the following:
- (I) Design alternatives considering the spatial arrangement of phasing of conductors.
- (II) Routing lines to limit exposures to areas of concentrated population and group facilities such as schools and hospitals.
- (III) Installing higher structures.

(IV) Widening right of way corridors.

(V) Burying lines.

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#### [indicates omission of unaffected rules]

#### 3206. Construction or Extension of Transmission Facilities.

- (a) Applicability. No utility and no cooperative electric association that which has voted to exempt itself pursuant to § 40-9.5-103, C.R.S., may commence new construction, or extension of transmission facilities or projects until either the Commission notifies the utility or cooperative electric association that such facilities or projects do not require a certificate of public convenience and necessity (CPCN) or the Commission issues a certificate of public convenience and necessity. Cooperative electric associations that Rural electric cooperatives which have elected to exempt themselves from the Public Utilities Law pursuant to § 40-9.5-103, C.R.S., do not need a certificate of public convenience and necessity for new construction or extension of transmission facilities or projects when such construction or expansion is contained entirely within the cooperative's certificated area.
- (b) CPCN requirements for new transmission facilities. For all parties subject to paragraph (a) of this rule, a certificate of public convenience and necessity will be required for all new projects designed at 230 kV and above, even if these projects will be initially operated at a lower voltage. In addition, a certificate of public convenience and necessity will be required for new 115 kV projects if they do not meet the noise and magnetic field thresholds in paragraphs (f) and (g) of this rule or the long range plan described in paragraph (h), or if the Commission determines that they have unusual system impact or expense. The projects requiring a certificate of public convenience and necessity under the terms of this paragraph (b) are not in the ordinary course of business. In any event, the utility or cooperative electric association may request a certificate of public convenience and necessity for any project.
- (cb) CPCN requirements for extension of transmission facilities. For all parties subject to paragraph (a) of this rule, the following Certain modifications to transmission facilities that were not part of the construction design authorized through a previous Commission determination shall be reviewed by the Commission for determination of whether a certificate of public convenience and necessity modifications are not in the ordinary course of business and shall require a certificate of public convenience and necessity: is needed for the proposed modification or whether the proposed modification is in the ordinary course of business. Modifications requiring this Commission determination shall be limited to the following:
  - (I) Modification to an existing transmission line with a voltage of 230 kV and above that increases the continuous MVA rating;
  - (II)(I) Replacement of the existing conductor with another having a higher ampacity or with multiple conductors, with continued operation at the existing voltage; Modification to an existing transmission line with a voltage of 115 kV or less, including increasing the continuous MVA rating, wherein either the noise or magnetic field thresholds in paragraphs (f) and (g) of this rule are exceeded;
  - (III)(III) Modification of the transmission facility so that it will be operated at a higher voltage, with or without conductor replacement; and

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- (III) \_\_\_(IV) \_\_Extensions of existing <u>230 kV</u> substations that require acquisition of \_-additional land for <u>expansion of the substation yard.expansion of the substation yard.</u>
- (IV) All other modifications to existing transmission facilities shall not require a certificate of public convenience and necessity and shall be deemed to be in the ordinary course of business.
- Annual report for planned transmission facilities. No later than April 30 of each year, each electric utility and each cooperative electric association that which has voted to exempt itself pursuant to § 40-9.5-103, C.R.S., shall file with submit to the Commission its a filing for a determination of which of the utility's proposed new construction or extension of transmission facilities for the next three calendar years, commencing with the year following the filing. This filing shall also include projects with an in-service date within five years of the filing. are necessary in the ordinary course of business and which require a certificate of public convenience and necessity prior to construction. The\_filing shall contain a reference to all such proposed new construction or extensions, regardless of whether the utility or cooperative electric association has referenced such new construction or extensions in prior annual filings. Further, amended filings or filings of an emergency nature outside the April 30 timeframe are permitted. The report can request a determination that 115 kV projects that meet the requirements outlined in paragraph (b) of this rule do not need a certificate of public convenience and necessity. For each project, the filing shall contain the following:
  - (I) The name, proposed location, and function or purpose of the project, including:
    - (A) If the project is a substation or related facilityies, the voltage level and the continuous MVA rating of major equipment.
    - (B) If the project is a transmission line, the voltage, the length in miles, the continuous MVA rating, and the substation termination points.
  - (II) The estimated cost of the project and the manner in which it is expected to be financed.
  - (III) The projected date for the start of construction, the estimated date of completion, and the estimated in-service date, of commencement of operation of each project.
- (e) Annual report for ongoing transmission projects. In addition to the information provided in paragraph (d) of this rule, the filing shall provide the following information:
  - (IV) For new construction, or extensionsall projects that have been referenced in prior annual filings, an update of the status of, and any changes to (including cancellations), such projects. Once a project is reported as completed, its status can be removed in subsequent filingsnew construction or extensions.
  - (II) A listing of all projects completed during the past calendar year which have not been referenced in prior filings. Examples of such projects include, but are not limited to, the following:
    - (A) New transformers, breakers, or capacitor banks 115 kV or higher, or replacement of such equipment with larger equipment.
    - (B) The raising and/or strategic placement of transmission structures in order to raise the conductor.

- (C) Modification to 115 kV and below transmission lines, including modification of the continuous MVA rating. If the modification increases the projected noise and EMF levels, the new values shall be reported.
- (D) Expansion of existing 115 kV and below substations that required the acquisition of additional land.
- Electromagnetic fields. This paragraph (f) applies to any application for a certificate of public convenience and necessity or any filing made pursuant to paragraph (d) of this rule for which the Commission is requested to determine that a 115 kV project does not need a certificate of public convenience and necessity. In addition to the information provided in paragraph (c) of this rule, the filing shall include the expected level of electromagnetic fields (EMF) at the edge of the transmission line right-of-way or substation boundary, at a location one meter above the ground.
  - (I) In the event there is no defined transmission line right-of-way or the transmission line is located at the edge of a highway or railroad right-of-way, then the measurement will be taken at a point 50 feet from the vertical projection onto the ground of the outermost conductor.
  - (II) For a right-of-way containing a single circuit, the EMF level will be presented at the continuous MVA rating of that circuit.
  - (III) For a -right-of-way containing multiple circuits, the EMF level will be presented with one circuit out of service and the remaining circuits at their continuous MVA rating.
  - (IV) A level of EMF 150 mG (milliGauss) and below is not subject to further review and need not be mitigated to a lower level.
  - (V) If the projected EMF level is above 150 mG, then the filing must present a range of alternatives (e.g., different spatial arrangement of conductors, higher structures, wider rights-of-way, undergrounding lines), and associated costs, that reduces the EMF level to 150 mG.
  - (VI) In the instance where the EMF level cannot be reduced to 150 mG, then the filing must present a range of alternatives, and associated costs, that reduces the EMF level to the lowest possible level.
  - (VII) If either subparagraph (f)(V) or (f)(VI) is applicable, then the filing must also describe the efforts and associated costs to route the line away from concentrated population and group facilities such as schools and hospitals.
  - (VIII) If either subparagraph (f)(V) or (f)(VI) is applicable, the Commission shall weigh the societal, engineering, and economic considerations of the project as originally proposed, and the alternatives in determining whether the certificate of public need and necessity should be granted describe the utility's actions and techniques relating to prudent avoidance with respect to planning, siting, construction, and operation of the proposed construction or extension. As used in this paragraph, "prudent avoidance" means the striking of a reasonable balance between the potential health effects of exposure to magnetic fields and the cost and impacts of mitigation of such exposure, by taking steps to reduce the exposure at reasonable or modest cost. The steps and techniques may include, without limitation, the following:
  - (I) Design alternatives that consider the spatial arrangement of phasing of conductors.

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- (II) Routing lines to limit exposures to areas of concentrated population and group facilities such as schools and hospitals.
- (III) Installing higher structures.
- (IV) Widening right of way corridors.
- (V) Burying lines.
- Noise. This paragraph (g) applies to any application for a certificate of public convenience and necessity or any filing made pursuant to paragraph (d) of this rule for which the Commission is requested to determine that a 115 kV project does not need a certificate of public convenience and necessity. In addition to the information provided in paragraph (c) of this rule, tThe filing applying utility shall include the projected level of noise radiating beyond the property line at a distance of 25 feet. describe its actions and techniques relating to cost effective noise mitigation with respect to the planning, siting, construction, and operation of the proposed transmission construction or extension. If the transmission facility has reached the design stage where noise levels can be calculated, t
  - The filingapplying utility shall provide computer studies which show the potential level of noise levels expressed in db(A). and measured at the edge of the transmission line right-of-way. These computer studies shall be the output of utility standard programs, such as EPRI's EMF Workstation 2.51 ENVIRO Program -- Bonneville Power Administration model and use the assumption that the proposed facility is operating at its highest continuous design voltage.
  - (II) A level of noise at or below the values listed is not subject to further review and need not be mitigated to a lower level.
    - (A) Residential and agricultural 50 db(A)
    - (B) Commercial 55 db(A)
    - (C) Light industrial 65 db(A)
    - (D) Industrial 75 db(A)
  - (III) If the projected level of noise does not meet the threshold limits in subparagraph (g)(II), then the filing must present a range of alternatives (larger conductors, bundled conductors, different spatial arrangement of conductors, higher structures, wider rights-of-way), and associated costs, that reduces the level of noise to the proper threshold value.
  - (IV) In the instance where the level of noise cannot be reduced to the threshold limits in subparagraph (g)(II), then the filing must present a range of alternatives, and associated costs, that reduces the level of noise- to the lowest possible level,
  - (V) If either subparagraph (g)(III) or (g)(IV) is applicable, the filing must also describe the efforts and associated costs to route the line away from concentrated population and group facilities such as schools and hospitals.
  - (VI) If either subparagraph (g)(III) or (g)(IV) is applicable, the Commission shall weigh the societal, engineering, and economic considerations of the project as originally proposed,

and the alternatives in determining whether the certificate of public convenience and necessity should be granted. The steps and techniques may include, without limitation, the following:

- (I) Bundled conductors.
- (II) Larger conductors.
- (III) Design alternatives considering the spatial arrangement of phasing of conductors.
- (IV) Corona-free attachment hardware.
- (V) Conductor quality.
- (VI) Handling and packaging of conductor.
- (VII) Construction techniques.
- (VIII) Line tension.
- (h) Long range planning. This paragraph (h) applies to any application for a certificate of public convenience and necessity or any filing made pursuant to paragraph (d) of this rule for which the Commission is requested to determine that a 115 kV project does not need a certificate of public convenience and necessity. The filing shall explain how the proposed project is compatible with the conceptual 20 and 30 year needs of the transmission system.
  - (I) If the proposed project is a transmission line, then the discussion should address the initial and ultimate design operating voltage, the initial and ultimate right-of-way needs, and the initial and ultimate noise and EMF projections.
  - (II) If the proposed project is a substation, then the discussion should describe the initial and ultimate electrical configuration, the initial and ultimate property requirements, and initial and ultimate noise and EMF projections.
  - (III) If the conceptual 20 and 30 year long range plan has been submitted to the Commission and evaluated in a separate docket, and addresses the long term rights-of-way needs, the ultimate number and voltage of transmission lines required, the ultimate substation electrical configuration requirements, and the initial and ultimate noise and EMF projections, then the current filing merely needs to reference that docket. In this instance, the substance of that long range plan will not be at issue in the current filing.
- (if) Review of annual report. Filings made in accord with paragraph (d) of this rule will be evaluated in the following manner:
  - (I) The Commission shall give notice within 15 days of the filing to the parties it believes to be interested in the subject matter of the filing.
  - (II) Any interested party may file comments within 30 days of the notice referenced in subparagraph (i)(l).
  - (III) Commission Staff shall review the filing and any comments received and shall make its recommendations within the 15 days following the end of the notice period. The Commission will give notice, of each filing made pursuant to this rule to all those who it

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believes may be interested. Any interested person may file comments regarding the projects by May 15.

- (g) The Staff shall review the filing and any comments received and shall make recommendations, according to the following schedule:
- (I) For any new construction or extension which is scheduled to begin in the calendar year of the filing or in the next calendar year, the Staff shall make its recommendations by May 31 of the year in which the filing is made.
- (II) For any new construction or extension which is scheduled to begin in the second or third calendar year following the year in which the filing is made, the staff shall make its recommendations by August 31 of the year in which the filing is made.
- (h) The Commission shall issue its decision in accordance with the following schedule:
- (I) For any new construction or extension of transmission facilities or projects which is scheduled to begin in the calendar year of the filing or in the next calendar year, the decision designating each transmission facility that requires a certificate of public convenience and necessity will be issued by June 30 of the year in which the filing is made.
- (II) For any new construction or extension of transmission facilities which is scheduled to begin in the second or third calendar year following the year in which the filing is made, the decision designating each transmission facility that requires a certificate of public convenience and necessity will be issued by October 31 of the year in which the filing is made.
- (ji) <u>Service connections. All parties subject to paragraph (a) of this rule The utility</u> shall install and maintain service connections from transmission extensions consistent with conditions contained in the utility's tariff.
- (j) In addition to the list of new construction or extension of transmission facilities, each utility shall provide by April 30 of each year a list of projects built during the past calendar year. These projects, considered as being done in the normal course of business, shall include the following:
  - (I) New and /or the replacement of transformers, breakers, or capacitor banks with larger transformers, breakers or capacitor banks.
  - (II) The raising and/or strategic placement of transmission structures in order to raise the conductor, thereby increasing clearance, permitting more current flow and increasing the MVA rating.
  - (III) The declaration of a higher rating for a line after an engineering and physical inspection such that existing line clearances are sufficient to allow more current flow, thereby increasing the MVA rating.

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### COLORADO DEPARTMENT OF REGULATORY AGENCIES

## **Public Utilities Commission**

### 4 CODE OF COLORADO REGULATIONS (CCR) 723-3

# PART 3 RULES REGULATING ELECTRIC UTILITIES

\* \* \*

[indicates omission of unaffected rules]

#### 3102. Certificate of Public Convenience and Necessity for Facilities.

- (a) A utility seeking authority to construct and to operate a facility or an extension of a facility pursuant to § 40-5-101, C.R.S., shall file an application pursuant to this rule.
  - (I) If the facility is not a transmission facility, the utility need not apply to the Commission for approval of construction and operation of the facility or an extension of the facility which is in the ordinary course of business. The utility shall apply to the Commission for approval of construction and operation of a facility or an extension of a facility which is not in the ordinary course of business.
  - (II) If the facility is a transmission facility, in addition to the requirements in paragraph (b) of this rule, the utility shall comply with rule 3206.
- (b) An application for certificate of public convenience and necessity to construct and to operate facilities or an extension of a facility pursuant to § 40-5-101, C.R.S., shall include, in the following order and specifically identified, the following information, either in the application or in appropriately identified attached exhibits:
  - (I) The information required in paragraphs 3002(b) and 3002(c).
  - (II) A statement of the facts (not conclusory statements) relied upon by the applying utility to show that the public convenience and necessity require the granting of the application or citation to any Commission decision that is relevant to the proposed facilities.
  - (III) A description of the proposed facilities to be constructed.
  - (IV) Estimated cost of the proposed facilities to be constructed.
  - (V) Anticipated construction start date, construction period, and in-service date.
  - (VI) A map showing the general area or actual locations where facilities will be constructed, population centers, major highways, and county and state boundaries.
  - (VII) As applicable, electric one-line diagrams.

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- (VIII) As applicable, information on alternatives studied, costs for those alternatives, and criteria used to rank or eliminate alternatives.
- (IX) As applicable, a report of prudent avoidance measures considered and justification for the measures selected to be implemented.
- (X) For construction or extension of transmission facilities, the technical analyses performed for the selection of the proposed project, and alternatives.

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#### [indicates omission of unaffected rules]

#### 3206. Construction or Extension of Transmission Facilities.

- (a) Applicability. No utility and no cooperative electric association that has voted to exempt itself pursuant to § 40-9.5-103, C.R.S., may commence new construction, or extension of transmission facilities or projects until either the Commission notifies the utility or cooperative electric association that such facilities or projects do not require a certificate of public convenience and necessity (CPCN) or the Commission issues a certificate of public convenience and necessity. Cooperative electric associations that have elected to exempt themselves from the Public Utilities Law pursuant to § 40-9.5-103, C.R.S., do not need a certificate of public convenience and necessity for new construction or extension of transmission facilities or projects when such construction or expansion is contained entirely within the cooperative's certificated area.
- (b) CPCN requirements for new transmission facilities. For all parties subject to paragraph (a) of this rule, a certificate of public convenience and necessity will be required for all new projects designed at 230 kV and above, even if these projects will be initially operated at a lower voltage. In addition, a certificate of public convenience and necessity will be required for new 115 kV projects if they do not meet the noise and magnetic field thresholds in paragraphs (f) and (g) of this rule or the long range plan described in paragraph (h), or if the Commission determines that they have unusual system impact or expense. The projects requiring a certificate of public convenience and necessity under the terms of this paragraph (b) are not in the ordinary course of business. In any event, the utility or cooperative electric association may request a certificate of public convenience and necessity for any project.
- (c) CPCN requirements for extension of transmission facilities. For all parties subject to paragraph (a) of this rule, the following modifications are not in the ordinary course of business and shall require a certificate of public convenience and necessity:
  - (I) Modification to an existing transmission line with a voltage of 230 kV and above that increases the continuous MVA rating;
  - (II) Modification to an existing transmission line with a voltage of 115 kV or less, including increasing the continuous MVA rating, wherein either the noise or magnetic field thresholds in paragraphs (f) and (g) of this rule are exceeded;
  - (III) Modification of the transmission facility so that it will be operated at a higher voltage, with or without conductor replacement; and

- (IV) Extensions of existing 230 kV substations that require acquisition of additional land for expansion of the substation yard.
- (d) Annual report for planned transmission facilities. No later than April 30 of each year, each electric utility and each cooperative electric association that has voted to exempt itself pursuant to § 40-9.5-103, C.R.S., shall file with the Commission its proposed new construction or extension of transmission facilities for the next three calendar years, commencing with the year following the filing. This filing shall also include projects with an in-service date within five years of the filing. The filing shall contain a reference to all such proposed new construction or extensions, regardless of whether the utility or cooperative electric association has referenced such new construction or extensions in prior annual filings. Further, amended filings or filings of an emergency nature outside the April 30 timeframe are permitted. The report can request a determination that 115 kV projects that meet the requirements outlined in paragraph (b) of this rule do not need a certificate of public convenience and necessity. For each project, the filing shall contain the following:
  - (I) The name, proposed location, and function or purpose of the project, including:
    - (A) If the project is a substation or related facility, the voltage level and the continuous MVA rating of major equipment.
    - (B) If the project is a transmission line, the voltage, the length in miles, the continuous MVA rating, and the substation termination points.
  - (II) The estimated cost of the project.
  - (III) The projected date for the start of construction, the estimated date of completion, and the estimated in-service date.
- (e) Annual report for ongoing transmission projects. In addition to the information provided in paragraph (d) of this rule, the filing shall provide the following information:
  - (I) For all projects that have been referenced in prior filings, an update of the status of, and any changes to (including cancellations), such projects. Once a project is reported as completed, its status can be removed in subsequent filings.
  - (II) A listing of all projects completed during the past calendar year which have not been referenced in prior filings. Examples of such projects include, but are not limited to, the following:
    - (A) New transformers, breakers, or capacitor banks 115 kV or higher, or replacement of such equipment with larger equipment.
    - (B) The raising and/or strategic placement of transmission structures in order to raise the conductor.
    - (C) Modification to 115 kV and below transmission lines, including modification of the continuous MVA rating. If the modification increases the projected noise and EMF levels, the new values shall be reported.
    - (D) Expansion of existing 115 kV and below substations that required the acquisition of additional land.

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- (f) Electromagnetic fields. This paragraph (f) applies to any application for a certificate of public convenience and necessity or any filing made pursuant to paragraph (d) of this rule for which the Commission is requested to determine that a 115 kV project does not need a certificate of public convenience and necessity. The filing shall include the expected level of electromagnetic fields (EMF) at the edge of the transmission line right-of-way or substation boundary, at a location one meter above the ground.
  - (I) In the event there is no defined transmission line right-of-way or the transmission line is located at the edge of a highway or railroad right-of-way, then the measurement will be taken at a point 50 feet from the vertical projection onto the ground of the outermost conductor.
  - (II) For a right-of-way containing a single circuit, the EMF level will be presented at the continuous MVA rating of that circuit.
  - (III) For a right-of-way containing multiple circuits, the EMF level will be presented with one circuit out of service and the remaining circuits at their continuous MVA rating.
  - (IV) A level of EMF 150 mG (milliGauss) and below is not subject to further review and need not be mitigated to a lower level.
  - (V) If the projected EMF level is above 150 mG, then the filing must present a range of alternatives (e.g., different spatial arrangement of conductors, higher structures, wider rights-of-way, undergrounding lines), and associated costs, that reduces the EMF level to 150 mG.
  - (VI) In the instance where the EMF level cannot be reduced to 150 mG, then the filing must present a range of alternatives, and associated costs, that reduces the EMF level to the lowest possible level.
  - (VII) If either subparagraph (f)(V) or (f)(VI) is applicable, then the filing must also describe the efforts and associated costs to route the line away from concentrated population and group facilities such as schools and hospitals.
  - (VIII) If either subparagraph (f)(V) or (f)(VI) is applicable, the Commission shall weigh the societal, engineering, and economic considerations of the project as originally proposed, and the alternatives in determining whether the certificate of public need and necessity should be granted.
- (g) Noise. This paragraph (g) applies to any application for a certificate of public convenience and necessity or any filing made pursuant to paragraph (d) of this rule for which the Commission is requested to determine that a 115 kV project does not need a certificate of public convenience and necessity. The filing shall include the projected level of noise radiating beyond the property line at a distance of 25 feet.
  - (I) The filing shall provide computer studies which show the potential level of noise expressed in db(A). These computer studies shall be the output of utility standard programs, such as EPRI's EMF Workstation 2.51 ENVIRO Program -- Bonneville Power Administration model and use the assumption that the proposed facility is operating at its highest continuous design voltage.
  - (II) A level of noise at or below the values listed is not subject to further review and need not be mitigated to a lower level.

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(A)	Residential and agricultural	50 db(A)
(B)	Commercial	55 db(A)
(C)	Light industrial	65 db(A)
(D)	Industrial	75 db(A)

- (III) If the projected level of noise does not meet the threshold limits in subparagraph (g)(II), then the filing must present a range of alternatives (larger conductors, bundled conductors, different spatial arrangement of conductors, higher structures, wider rights-of-way), and associated costs, that reduces the level of noise to the proper threshold value.
- (IV) In the instance where the level of noise cannot be reduced to the threshold limits in subparagraph (g)(II), then the filing must present a range of alternatives, and associated costs, that reduces the level of noise to the lowest possible level,
- (V) If either subparagraph (g)(III) or (g)(IV) is applicable, the filing must also describe the efforts and associated costs to route the line away from concentrated population and group facilities such as schools and hospitals.
- (VI) If either subparagraph (g)(III) or (g)(IV) is applicable, the Commission shall weigh the societal, engineering, and economic considerations of the project as originally proposed, and the alternatives in determining whether the certificate of public convenience and necessity should be granted.
- (h) Long range planning. This paragraph (h) applies to any application for a certificate of public convenience and necessity or any filing made pursuant to paragraph (d) of this rule for which the Commission is requested to determine that a 115 kV project does not need a certificate of public convenience and necessity. The filing shall explain how the proposed project is compatible with the conceptual 20 and 30 year needs of the transmission system.
  - (I) If the proposed project is a transmission line, then the discussion should address the initial and ultimate design operating voltage, the initial and ultimate right-of-way needs, and the initial and ultimate noise and EMF projections.
  - (II) If the proposed project is a substation, then the discussion should describe the initial and ultimate electrical configuration, the initial and ultimate property requirements, and initial and ultimate noise and EMF projections.
  - (III) If the conceptual 20 and 30 year long range plan has been submitted to the Commission and evaluated in a separate docket, and addresses the long term rights-of-way needs, the ultimate number and voltage of transmission lines required, the ultimate substation electrical configuration requirements, and the initial and ultimate noise and EMF projections, then the current filing merely needs to reference that docket. In this instance, the substance of that long range plan will not be at issue in the current filing.
- (i) Review of annual report. Filings made in accord with paragraph (d) of this rule will be evaluated in the following manner:
  - (I) The Commission shall give notice within 15 days of the filing to the parties it believes to be interested in the subject matter of the filing.

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- (II) Any interested party may file comments within 30 days of the notice referenced in subparagraph (i)(I).
- (III) Commission Staff shall review the filing and any comments received and shall make its recommendations within the 15 days following the end of the notice period.
- (j) Service connections. All parties subject to paragraph (a) of this rule shall install and maintain service connections from transmission extensions consistent with conditions contained in the utility's tariff.

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[indicates omission of unaffected rules]