

# **ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**

## **Statement of Basis and Purpose**

### **APPENDIX B**

#### **Statement of Basis, Specific Statutory Authority, and Purpose New Rules and Amendments to Current Rules of the Colorado Energy and Carbon Management Commission, 2 C.C.R. § 404-1**

**Cause No. 1R Docket No. 240500115**

#### **Deep Geothermal Rulemaking**

This statement sets forth the basis, specific statutory authority, and purpose for amendments and additions (“Deep Geothermal Rulemaking”) to the Colorado Energy and Carbon Management Commission (“Commission” or “ECMC”) Rules of Practice and Procedure, 2 C.C.R. § 404-1 (“Rules”).

Unless otherwise specified, the new rules and amendments become effective twenty days after publication in the Colorado Register, per C.R.S. § 24-4-103(5).

In adopting amendments to the Rules, the Commission relied upon the entire administrative record for this rulemaking proceeding, which formally began on May 15, 2024, when the Commission submitted its Notice of Rulemaking to the Colorado Secretary of State for revisions to Rules. This record includes public comments, written prehearing statements, written prehearing testimony, and oral testimony and comments provided during public hearings and Commission deliberations.

#### **Background**

On May 22, 2023, Governor Polis signed into law Senate Bill 23-285 which, among other things, amended the Colorado Geothermal Resources Act granting the Commission exclusive authority to regulate Deep Geothermal Operations in Colorado. C.R.S. §37-90.5-106(1)(b)(I). Senate Bill 23-285 also authorized the Commission to adopt rules for such regulation. *Id.* The Commission instituted this Deep Geothermal Rulemaking to comply with the relevant provisions of Senate Bill 23-285.

#### **Statutory Authority**

The Commission’s authority to promulgate new Rules, as well as amendments to the existing Rules is derived from the following sections of the Colorado Geothermal Resources Act (“Geothermal Act”), C.R.S. §§ 37-90.5-101 - 111, and the Oil and Gas Conservation Act (“Act”), C.R.S. §§ 34-60-101 - 139:

- C.R.S. §37-90.5-102 (Legislative declaration);
- C.R.S. §37-90.5-103 (Definitions);
- C.R.S. §37-90.5-105 (Access—reasonable accommodation);

## **ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**

### **Statement of Basis and Purpose**

- C.R.S. §37-90.5-106 (Regulation of geothermal resource operations–reinjection–fees–rules);
- C.R.S. §37-90.5-107 (Permits for the use of geothermal resources–rules);
- C.R.S. §37-90.5-109 (Geothermal resource units–rules);
- C.R.S. §37-90.5-111 (Coordination between the commission and the state engineer);
- C.R.S. §34-60-103 (Definitions);
- C.R.S. §34-60-104.5 (Duties of the Director);
- C.R.S. §34-60-105 (Powers and authority of the commission);
- C.R.S. §34-60-106 (Specific powers and duties of the Commission);
- C.R.S. §34-60-108 (Procedural rules); and
- C.R.S. §34-60-121 (Enforcement).

### **Stakeholder Participation**

The Commission began the informal stakeholder process in July of 2023 when ECMC Staff began meeting with stakeholder groups interested in providing guidance and feedback throughout the initial drafting process. These stakeholder groups included, but are not limited to, other state and federal agencies, experts, research organizations, universities, local government organizations, environmental organizations, wildlife organizations, and industry organizations and geothermal operators. On September 6, 2023, ECMC Staff presented a Deep Geothermal Regulatory Concept Paper to the Commission in which ECMC Staff described their proposed approach to an initial draft of the Deep Geothermal Rules. On October 18, 2023, the Commission published an initial “strawdawg” draft of the Deep Geothermal Rules on ECMC’s website. From October 18 through November 13, 2023, the Commission welcomed public comment on the initial “strawdawg” draft. At the Commission’s regular weekly public meeting on November 7, 2023, individual commissioners provided their feedback to ECMC Staff on the “strawdawg” draft. Based on the public comments and individual commissioner feedback, ECMC Staff revised the “strawdawg” draft.

Beginning in December of 2023 and continuing through April of 2024, ECMC Staff continued to revise the draft Deep Geothermal Rules while engaging with a wide range of stakeholders including local government coalitions, environmental groups, sister state regulatory agencies, the Environmental Protection Agency, and the regulated community. On May 15, 2024, the Commission filed with the Secretary of State its notice of rulemaking, draft Deep Geothermal Rules, and this initial draft Statement of Basis and Purpose.

## **ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**

### **Statement of Basis and Purpose**

The Commission and ECMC Staff received feedback from stakeholders on the initial draft Deep Geothermal Rules and Statement of Basis and Purpose. Based on that feedback, ECMC Staff drafted a revised draft Deep Geothermal Rules and Statement of Basis and Purpose. On July 25, 2024, ECMC Staff submitted the revised drafts and filed them into the ECMC docket for Deep Geothermal Rulemaking (ECMC Docket No. 240500115).

Prior to the hearing on the Deep Geothermal Rulemaking, parties submitted prehearing statements, responses to prehearing statements, and written testimony. The formal hearing for the Deep Geothermal Rulemaking began on August 5, 2024. The Commission heard public comments and party testimony regarding the Deep Geothermal Rules. The Commission then began deliberations on August 6, 2024, and instructed ECMC Staff to adjust provisions of revised draft Deep Geothermal Rules and Statement of Basis and Purpose consistent with Commission deliberations. ECMC Staff filed an updated version of the Deep Geothermal Rules and Statement of Basis and Purpose into the Deep Geothermal Rulemaking docket on August 9, 2024. The updated draft incorporated instructions for revisions by the Commission. On August 12, 2024, the Commission resumed the Deep Geothermal Rulemaking hearing and deliberated upon the updated version submitted by Staff. The Commission resolved outstanding issues with the updated draft and voted unanimously to adopt the updated version that Staff filed on August 9, 2024.

### **Identification of New and Amended Rules**

Consistent with its statutory authority and its legislative mandates, and in accord with the administrative record, the Commission added a new 1300 Series of Rules. The Commission also revised several definitions in its 100 Series Rules and added several new definitions to its 100 Series Rules. These changes include:

- 100-Series Rules: definitions of Allocated Geothermal Resource, Ancillary Heat Production, Best Management Practices, Closed-Loop Geothermal System, Compensatory Mitigation Plan, Completed Well, Completion, Correlative Rights, Deep Geothermal Operation(s), Denver Basin Aquifers, Distributed Geothermal Resource, Director's Recommendation, DWR, Exploration and Production Waste ("E&P Waste"), Facility (including Deep Geothermal Facility and Oil and Gas Facility), Flowline (including Geothermal Flowline and Off-Location Flowline), Fluid, Geothermal Act, Geothermal By-Products, Geothermal Fluid, Geothermal Injection Well, Geothermal Pad Surface, Geothermal Resource, Geothermal Resource Unit ("GRU"), Geothermal Science Well, Hydraulic Fracturing Treatment, Inactive Well, Indian Lands, Injection Zone, Location (including Deep Geothermal Location and Oil and Gas Location), Material Medium, Nonconsumptive Geothermal Operation, Nontributary Groundwater, Oil and Gas Facility, Oil and Gas Location, Open-Loop Geothermal System, Operator (including Deep Geothermal Operator and Oil and Gas Operator), Orphaned Site, Owner, Pit, Productivity Test, Proximate Local Government, Reclamation,

## **ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**

### **Statement of Basis and Purpose**

Reference Area, Refile, Regulatory Compliance Program, Related Operators, Relevant Local Government, Responsible Party, SLB, Special Purpose Pits, Surface Owner, Surface Use Agreement, Used or Useful, Well (including Deep Geothermal Well and Oil and Gas Well), Well Site, Wildlife Mitigation Plan, and Wildlife Protection Plan;

- The addition of new 1300-Series Rules 1301 through 1320; and
- The Commission also adopted conforming and clarifying changes, where necessary.

The Commission intends for its new and revised rules to be prospective—applying to new operations twenty days after publication in the Colorado Register—unless otherwise specified in the text of a Rule.

### **Incorporation by Reference**

Certain 1300-Series Rules incorporate Rules from other series by reference. While some Rules from other series are written in an oil-and-gas specific context, the Commission intends that those Rules apply to Deep Geothermal Operations in a reasonable manner. For example, Rule 1313.d incorporates Rule 406 by reference. Rule 406.a. reads, “Operators will construct Oil and Gas Locations in conformance with the approved Form 2A and all applicable and approved Form 4s.” The Commission expects that Deep Geothermal Operators will apply Rule 406.a. to Deep Geothermal Operations by reading it as, “Operators will construct Deep Geothermal Locations in conformance with the approved Form 2G and all applicable and approved Form 4s.”

The version of the Rules in effect as of the date these 1300 Series Deep Geothermal Rules are promulgated are the Rules incorporated by reference. Nothing in this Statement of Basis, Specific Statutory Authority, and Purpose prohibits the Commission from amending the 1300 Series Deep Geothermal Rules to incorporate future amendments to other series.

### **100 Series Rules–Definitions**

The Commission revised or reorganized existing 100 Series Definitions, or adopted new definitions, of the following terms:

***Allocated Geothermal Resource***

***Ancillary Heat Production***

***Best Management Practices***

***Closed-Loop Geothermal System***

***Compensatory Mitigation Plan***

***Completed Well***

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

*Completion*

*Correlative Rights*

*Deep Geothermal Operation(s)*

*Denver Basin Aquifers*

*Distributed Geothermal Resource*

*Director's Recommendation*

*DWR*

*Exploration and Production Waste ("E&P Waste")*

*Facility*

*Deep Geothermal Facility*

*Oil and Gas Facility*

*Flowline*

*Geothermal Flowline*

*Off-Location Flowline*

*Fluid*

*Geothermal Act*

*Geothermal By-Products*

*Geothermal Fluid*

*Geothermal Injection Well*

*Geothermal Pad Surface*

The Commission intends that when the Deep Geothermal Rules require measurement from the Geothermal Pad Surface to another point, the Operator will conduct measurements from the edge of the Geothermal Pad Surface closest to the thing being considered. For example, Rule 1314.f.(2) requires that no Geothermal Pad Surface will be located less than 500 feet from one or more Building Units not subject to a Surface Use Agreement or waiver unless the applicant can justify such placement with technical testimony and has obtained informed consent from the Building Unit owner(s) or tenant(s). In that case, the Operator will conduct the 500-foot measurement from the edge of the Geothermal Pad Surface closest to the nearest Building Unit.

*Geothermal Resource*

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

*Geothermal Resource Unit (“GRU”)*

*Geothermal Science Well*

*Hydraulic Fracturing Treatment*

*Inactive Well*

*Indian Lands*

*Injection Zone*

*Location*

*Deep Geothermal Location*

*Oil and Gas Location*

*Material Medium*

*Nonconsumptive Geothermal Operation*

*Nontributary Groundwater*

*Open-Loop Geothermal System*

*Operator*

*Oil and Gas Operator*

*Deep Geothermal Operator*

*Orphaned Site*

*Owner*

*Pit*

*Productivity Test*

*Proximate Local Government*

*Reclamation*

*Reference Area*

*Refile*

*Regulatory Compliance Program*

*Related Operators*

*Relevant Local Government*

*Responsible Party*

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

***SLB***

***Special Purpose Pits***

***Surface Owner***

***Surface Use Agreement***

***Unavoidable Adverse Impacts***

***Used or Useful***

***Well***

***Deep Geothermal Well***

***Oil and Gas Well***

***Well Site***

***Wildlife Mitigation Plan***

***Wildlife Protection Plan***

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

**1300 Series - Deep Geothermal Operations**

The Commission added a new 1300 Series to the Rules. The Commission intends for the 1300 Series to be the primary, but not exclusive, series applicable to Deep Geothermal Operations. Generally, the Commission intends for a Deep Geothermal Operator to look to the 1300 Series as a roadmap for regulatory obligations associated with Deep Geothermal Operations. The 1300 Series incorporates by reference Rules from other Series, therefore Deep Geothermal Operations are subject to such other Rules.

***Rule 1301***

The Commission added Rule 1301.a. to specify which 200-Series Rules' General Provisions are applicable to Deep Geothermal Operations. The Commission added Rule 1301.c. to specify that Rule 215, regarding Local Government Designees, also applies in the context of Deep Geothermal Operations.

***Rule 1302***

The Commission added Rule 1302 to provide general permitting requirements for Deep Geothermal Operations. More specific Rules associated with particular Deep Geothermal Operations and/or permits are included elsewhere in the 1300 Series.

***Rule 1303***

The Commission added Rule 1303 to address Local-Government siting authority for Deep Geothermal Operations. The Geothermal Resources Act specifies that the Commission will not issue a permit for Deep Geothermal Operations unless the Applicant has filed a siting application with the Local Government in whose jurisdiction the Operations will occur, or the Local Government does not regulate such siting. The Applicant must also provide evidence of the disposition of the Local Government application. C.R.S. §37-90.5-106(2)(b)(I).

***Rule 1303.a.***

The Commission added Rule 1303.a. to incorporate those statutory provisions providing Local Government siting authority over Deep Geothermal Operations found at C.R.S. §§ 24-65.1-101 et seq., 29-20-104, 30-15-401, and 37-90.5-106(2)(b)(I).

During rulemaking deliberations, stakeholders requested that Deep Geothermal Operators provide notice of proposed Deep Geothermal Locations to mineral owners. Stakeholders expressed concern that a Deep Geothermal Location might prevent a mineral owner from the surface use necessary to access their minerals. Stakeholders requested that the Commission review §24-65.5-101, *et seq.*, C.R.S., which addresses Local Government approval of surface development, as a model for how such notice might occur. The Commission resolved to investigate the issue in an upcoming



**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

regulatory study required by § 37-90.5-110(2), C.R.S. and to consider addressing the issue in a potentially future rulemaking.

*Rules 1303.b. through d.*

The Commission added Rules 1303.b. and c. to specify the effect of a Local Government's approval or denial of a proposed Deep Geothermal Location within a permit application for Deep Geothermal Operations, Form 2G, or GRU permit. If a Local Government does not regulate siting of Deep Geothermal Locations, the Director will conduct a siting review (also referred to as a Location Assessment) pursuant to the relevant 1300 Series Rule(s). When a Local Government denies an applicant's proposed Deep Geothermal Location, the application must be subject to a full Commission hearing. When a Local Government denies an applicant's proposed Deep Geothermal Location, the permit application will not be decided by the Director, an ALJ, or a Hearing Officer. When a Local Government approves an applicant's proposed Deep Geothermal Location, the Director will consider the Local Government's siting disposition, and the applicant will still submit a Form 2G so that the Director or Commission can assess the proposed Deep Geothermal Location. If the Local Government regulates the siting of Deep Geothermal Location, but has not made a determination on the siting of a Deep Geothermal Location, the Director or Commission will conduct a siting review pursuant to the Commission's 1300 Series Rules.

Pursuant to Rule 1303.d., Applicants are also required to indicate whether their proposed Deep Geothermal Location is within an area designated as one of state interest under the provisions of C.R.S. § 24-65.1-108.

*Rules 1303.e. and f.*

Rule 1303.e. specifies how a Local Government may waive its right to notification required under the 1300-Series Rules. Rule 1303.e.(3) allows a Local Government, after having chosen not to regulate siting of Deep Geothermal Operations or receive notice under Commission Rules pursuant to Rule 1303.e.(3), to withdraw such waiver(s). However, the Commission intends that such withdrawal of waiver or certification pursuant to Rule 1303.e.(3) will not unnecessarily delay review and approval or denial of a permit application for Deep Geothermal Operations. Rule 1303.f. specifies that Relevant and Proximate Local Governments are entitled to pre-application consultations. However, the Commission recognizes the Relevant and Proximate Local Governments are allowed to opt out of this process if desired.

***Rule 1304***

The Commission added Rule 1304 to provide for a comprehensive rule on all consultations required for permit applications for Deep Geothermal Operations, except for those consultations with Local Governments required by Rule 1303. Pursuant to Rule 1304.a., an applicant will request a pre-application consultation with all entities entitled to a consultation pursuant to Rules 1303 and 1304. ECMC's current practice is

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

for the applicant to contact ECMC planning and permitting staff to coordinate a meeting that will engage all relevant parties.

Rules 1304.b. through d. contemplate consultations with individuals who may be impacted by a permit application for Deep Geothermal Operations (i.e., surface owners, building unit owners and tenants, and schools, child care centers, and school governing bodies). Rules 1304.e. through j. and 1304.l. contemplate consultations with other governing or regulatory entities (for example, CPW or the EPA). The Commission added Rules 1304.e. through j. and l. in recognition of other agencies' statutory and regulatory authority over specific aspects of Deep Geothermal Operations.

The Commission added Rule 1304.k. in recognition that some ECMC-permitted Deep Geothermal Projects may be located within the Southern Ute Indian Reservation, where both the surface and mineral estates are owned in fee by persons other than the Southern Ute Indian Tribe. The Commission also recognizes that Deep Geothermal Operations located near either the Southern Ute Indian Reservation or Ute Mountain Ute Reservation may have potential impacts on tribal minerals and/or Geothermal Resources.

Therefore, the Commission intends for the Director and Operator to conduct a pre-application consultation for all proposed Deep Geothermal Locations within the Southern Ute Indian Reservation to determine what impact, if any, the permit application for Deep Geothermal Operations may have on minerals and/or Geothermal Resources controlled by the Southern Ute Indian Tribe. Rule 1304.k.(1) does not refer to Deep Geothermal Locations within the exterior boundaries of the Ute Mountain Ute Reservation because the Ute Mountain Ute Reservation does not include allotted tracts on which ECMC-permitted Deep Geothermal Locations could be located.

However, the Commission also recognizes that Deep Geothermal Operations located near the exterior boundaries of either reservation have the potential to impact tribal minerals and/or Geothermal Resources. Therefore, Rule 1304.k. also requires pre-application consultation for permit applications which either the Southern Ute Indian Tribe or the Ute Mountain Ute Tribe find may impact tribal minerals and/or Geothermal Resources.

***Rule 1305***

The Commission added Rule 1305 to provide Operators with a single rule specifying the required contents for permit applications for Deep Geothermal Operations.

Rule 1305.b. lists the specific required components of a permit application. Pursuant to Rule 1305.b.(1), an applicant will include documentation demonstrating the applicant's status as an Owner of at least one geothermal tract within the proposed area. Rule 1305.b.(1).A. through C. is a non-inclusive list of documentation an applicant can provide. Note that, pursuant to C.R.S. §37-90.5-104(5), "Notwithstanding any provision of [Section 104 of the Geothermal Resources Act] to the contrary, geothermal

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

resources associated with nontributary groundwater shall not be transferred separately from the nontributary groundwater.” While ECMC generally does not review title to developed resources, the Commission is cognizant of the fact that a deed or lease purporting to convey Allocated Geothermal Resources must also convey associated nontributary groundwater.

Rule 1305.b.(3).O.i.aa. requires Deep Geothermal Operators to comply with Rule 304.c.(20).C., by which the Deep Geothermal Operators will describe their plan to facilitate ongoing and transparent communication with residents or tenants of an RBU or HOB, or a School Facility in a Disproportionately Impacted Community residing within 2,000 feet of the Deep Geothermal Location.

The Commission added Rule 1305.b.(3).O.i.bb. to specify how a Deep Geothermal Operator will engage with the Commission’s community liaisons to identify whether there are local organizations representative of the potentially impacted community. The Operator will distribute relevant information to the communities in collaboration with the local organizations.

In rulemaking deliberations, the Commission noted that the required use of community liaisons in Deep Geothermal permitting is pursuant to Rule 1305.b.(3).O.i. However, the Commission intends that community liaisons may be utilized in other contexts, as necessary. However, any such use should consider and defer to the statutory obligations of community liaisons pursuant to § 34-60-104.5(2)(d)(III), C.R.S.

Rule 1305.c. specifies how and when an applicant can submit substantially equivalent information or plans in lieu of components required by Rule 1305.b.

Rule 1305.d. addresses completeness determinations and ensuing public comment mechanisms and durations. The Commission recognizes that, for Oil and Gas Operations, there are situations where an Operator will submit only a Form 2, for example to reenter or deepen an existing well, or to refile an expired drilling permit. Such Form 2s are not subject to public comment and notice provisions under the Rules. The Commission recognizes similar scenarios will arise for Deep Geothermal Operations which require only a Form 2 applicable to an already-permitted Deep Geothermal Location which was previously subject to Rule 1305.d.’s public comment period. For the purposes of consistency, the Commission intends that such Form 2s (i.e., those Form 2s submitted individually and not as part of a larger permit application for Deep Geothermal Operations) are not subject to the notice of completeness and public comment provisions of Rule 1305.d.

Rule 1305.e. specifies how permit applications are considered and approved or denied. The Commission intends that, by default, permit applications for Deep Geothermal Operations and permit applications for Geothermal Resource Units will be considered and conditionally approved or denied by the Director. Pursuant to Rule 1305.e.(3), a conditional approval will become final ten days after the Director conditionally

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

approves the permit application, however, the Commission may stay the conditional approval and require a Commission hearing on its own motion.

The Commission also intends that, pursuant to Rule 1305.e.(4), the Director will have broad discretion to determine which permit applications warrant a Commission hearing. After these Deep Geothermal Rules become effective, the Director will report to the Commission every six months on how many permit applications for Deep Geothermal Operations or GRUs were considered and approved or denied administratively, how many were sent to the Commission for a hearing, what factors the Director considered in making those determinations, and any other relevant information to inform the Commission on how the administrative consideration and approval or denial is developing. After three years of biannual reports to the Commission, the Director will report annually.

Rule 1305.f. specifies criteria which are unnecessary for permitting of Geothermal Science Wells. Geothermal Science Wells are intended to test the scientific viability of contemplated Deep Geothermal Operations in a particular area. They are not intended to conduct Deep Geothermal Operations. If an Operator later contemplates converting a Geothermal Science Well for Deep Geothermal Operations, the Operator is subject to Rule 1311.

***Rule 1306***

The Commission added Rule 1306 to grant the Director authority to suspend approved permits for Deep Geothermal Operations, along with any associated GRU permit(s), Form 2G, or Form 2 if the Director has reasonable cause to believe that any information relied upon in approving the relevant application or granting the relevant permits was materially incorrect. It also provides a process for Commission review of such decisions.

***Rule 1307***

The Commission added Rule 1307.a to clarify that the validity of approved permits for Deep Geothermal Operations are finite in duration. Rules 1307.b. and c. prohibit extensions of approved permits, but allow for refile of such permit applications.

The Commission recognizes that a single Deep Geothermal Location can be permitted for use by multiple Geothermal Resource Units, and that an Operator may begin drilling operations associated with the first GRU within the five-year expiration deadline while failing to begin drilling as to the second (or other subsequent) GRU(s) within the deadline. In such a scenario, the Commission intends that the Form 2G associated with the Deep Geothermal Location will not expire as it is already in use by the first GRU.

During rulemaking deliberations, the Commission considered whether Rule 1307.a.(1) through (3) adequately address expiration and provided flexibility necessary for the Director or Commission to ensure that permits are not valid indefinitely and that the expiration deadline is appropriate for the type of Deep Geothermal Operation

## **ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**

### **Statement of Basis and Purpose**

contemplated. Therefore, the Commission decided to establish a five-year expiration period, rather than a three-year period. The Commission also added Rule 1307.a.(4) to allow the Director or Commission to specify permit-specific conditions the Operator must meet to avoid expiration. For example, in approving a permit for Deep Geothermal Operations, the Director or Commission may require that the Deep Geothermal Operator drill and/or complete the well before the expiration date, avoid multiple rig occupations on a single Deep Geothermal Location, or any other condition required to protect public health, safety, welfare, the environment, and wildlife resources, or avoid, minimize, and mitigate adverse impacts to Disproportionately Impacted Communities.

#### ***Rule 1308***

The Commission added Rule 1308 to specify the processes by which an Operator can request approval of subsequent operations on existing Well(s).

#### ***Rule 1309 and 1310***

The Commission added Rules 1309 and 1310 to allow for the creation of Geothermal Resource Units (“GRUs”), as authorized by C.R.S. §37-90.5-109 of the Geothermal Resources Act. Section 109 authorizes the Commission to adopt procedures for the establishment of GRUs. In regulating GRUs, the Commission may control well-spacing and production rates, control the quantity of Geothermal Fluid extracted (including requirements to reinject), adopt a comprehensive unit plan that encourages sustainable use, and require equitable compensation to any impacted interest owner of an Allocated Geothermal Resource. Notably, Section 109 only authorizes the Commission to establish GRUs as to Allocated Geothermal Resources, and does not allow the creation of GRUs for Distributed Geothermal Resources, regardless of the depth at which the Geothermal Resource is found.

#### ***Rule 1309.a.***

The Commission added Rule 1309.a. to provide Operators with the procedural requirements of applying for a GRU. At Rule 1309.a.(1), the Commission specifies that an application for a GRU can never precede the associated Deep Geothermal Operations permit application. The Operator must apply for the GRU simultaneously with the Deep Geothermal Operations permit application, or after the Deep Geothermal Operations permit application is approved. This is intended to prevent Operators from using the GRU process to sew up Geothermal Resources without actually developing them.

The provisions of Rule 1309.a.(2) provide Operators with the required components of a GRU application. Notably, this includes a comprehensive unit plan required by Rule 1309.a.(2).J., in which the Operator will describe their plan for equitably compensating the impacted Allocated Geothermal Resource interest owner(s). The Commission intends the unit plan required by Rule 1309.a.(2).J to address the requirements of 37-

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

90.5-109(1), C.R.S. This plan may involve reference to the Operator’s request to include unleased/nonconsenting Allocated Geothermal Resource interest owner(s), pursuant to Rule 1310, discussed below. See the discussion below at Rule 1310.b. for further explanation on equitable compensation.

At Rule 1309.a.(2).O., the Commission recognizes that pursuant to C.R.S. §37-90.5-104(5), “Notwithstanding any provision of [Section 104 of the Geothermal Resources Act] to the contrary, geothermal resources associated with nontributary groundwater shall not be transferred separately from the nontributary groundwater.” The Commission intends that GRUs approved by the Director or Commission do not impact ownership of the Geothermal Resource or any associated nontributary groundwater. Rather, an approved GRU authorizes the use of the Geothermal Resource and any associated nontributary groundwater, and the owner is to be compensated under Rule 1309.a.(2).J.

At Rule 1309.a.(3), the Commission recognizes that some GRUs may involve Geothermal Resources owned entirely by the Deep Geothermal Operator. The Deep Geothermal Operator must still establish a GRU because subsequent GRU applications may impact or be near the present GRU. However, if the Deep Geothermal Operator owns all Geothermal Resources to be included in the proposed GRU, terms of equitable compensation are not necessary as there is only one Geothermal Resource owner—the Deep Geothermal Operator itself.

*Rule 1309.b.*

The Commission added Rule 1309.b. to specify the process by which GRU applications will be reviewed and approved or denied. Similar to Rule 1305.e. on consideration of a permit application for Deep Geothermal Operations, the Commission contemplates administrative approval or denial by the Director, except where the GRU application includes unique circumstances warranting a special hearing as described at Rule 1305.e.(4). It is the Commission’s intention to allow administrative approval or denial of GRU applications to help facilitate the development of Deep Geothermal Operations. After significant development of Deep Geothermal Operations in the state, the Commission may contemplate more direct Commission management of GRUs.

*Rule 1309.c.*

The Commission added Rule 1309.c. to specify the permitting pathway for GRUs.

*Rule 1309.d.*

The Commission added Rule 1309.d. to address the possibility that, after the establishment and initial development of a GRU, the Commission or the Deep Geothermal Operator may discover that the actual Deep Geothermal Operations impact fewer or more Geothermal Resource owners than initially anticipated. In such a case, the Deep Geothermal Operator will, pursuant to Rule 1309.d., submit a Form 4 to propose amended boundaries to the already-established GRU. The Commission intends

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

that the Director or Commission may request, and the Deep Geothermal Operator will provide, any information necessary to assess the proposed amended GRU boundaries. The Commission requires that the Deep Geothermal Operator provide notice of the Form 4 to amend the GRU to those Geothermal Resource owners to be impacted by the proposed amendment. Form 4s to amend GRUs are not subject to the public comment provisions of Rule 1305.d.

*Rule 1310.a.*

The Commission added Rule 1310.a. to address equitable compensation of unleased Allocated Geothermal Resource interest owner(s) in GRUs. In C.R.S. §37-90.5-109, the General Assembly authorized the Commission to include unleased Allocated Geothermal Resource interest owners in a GRU by its use of the phrases, “to establish geothermal resource units” and “[r]equire the equitable compensation of an impacted owner of an allocated geothermal resource.” To establish a GRU which includes unleased Allocated Geothermal Resource interest owner(s), the Operator must comply with the provisions of Rule 1310.

*Rule 1310.b.*

The Commission added Rule 1310.b. to establish the criteria by which an Operator can request inclusion of an unleased Allocated Geothermal Resource interest owner(s). Rule 1310.b.(1) requires that the Operator secure the written consent of owners of more than 45% of the geothermal interests to be included in the GRU. Notably, this does not mean more than 45% of the total number of Owners need to be impacted. This means that the Owners from whom the Operator obtained written consent must collectively own more than 45% of the total Allocated Geothermal Resources to be included. If a single Allocated Geothermal Resource interest owner owns more than 45% of the total Allocated Geothermal Resources to be included, and that Owner has granted their written consent, the Operator has satisfied Rule 1310.b.(1)’s requirement.

However, pursuant to Rule 1310.b.(2), the Operator must have tendered good faith, reasonable offers for participation in the GRU to all unleased Allocated Geothermal Resource interest owners to be included in the proposed GRU. The Operator must also propose a plan for equitable compensation of those unleased Allocated Geothermal Resource interest owner(s) to be included in the GRU, pursuant to Rule 1310.b.(3).

The Commission recognizes that, at the time these Deep Geothermal Rules become effective, the market for Geothermal Resources subject to Commission jurisdiction is not well established. The Commission also recognizes that this presents difficulties for Deep Geothermal Operators, Geothermal Resource owners, the Commission, and ECMC Staff in determining what constitutes equitable compensation for Geothermal Resources included within a GRU. This issue is further exacerbated by the fact that Geothermal Resource production is not sufficiently similar to Oil and Gas production to draw direct comparisons between how Oil and Gas owners are equitably compensated and how Geothermal Resource owners might be equitably compensated. For example,

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

in Oil and Gas Operations, the resource is extracted, added to a gathering system, and never replenished. Therefore, compensating an Oil and Gas owner based on volumes extracted is commonplace. However, Geothermal Resources are self-replenishing—so long as they are not over extracted. This makes it difficult to predict how market forces will compensate Geothermal Resource owners.

Considering these issues and the fact that the Deep Geothermal Rules allow for administrative approval or denial of a permit application for Geothermal Resource Units, the Commission contemplates that the first permit applications for GRUs which propose inclusion of unleased Geothermal Resource owners will be subject to Commission hearings and Commission approval or denial. The Commission's intent is to allow the Deep Geothermal Operator, the Geothermal Resource owner, and any Affected Person to present evidence to the Commission for what constitutes equitable compensation. The Commission intends to review evidence presented by the parties at hearing and issue written orders explaining what factors Deep Geothermal Operators and ECMC Staff should consider when proposing or assessing a proposed plan for equitable compensation. This will allow the Commission to assess and determine what constitutes equitable compensation in this nascent Geothermal Resource market. After the Commission is satisfied that the Commission has built a sufficient body of case law indicating what factors are to be considered in a proposed plan for equitable compensation, the Commission intends to delegate to ECMC Staff future consideration and approval or denial of permit applications under Rule 1310.

*Rule 1310.c.*

The Commission added Rule 1310.c. to specify the minimum procedural requirements for inclusion of a nonconsenting Allocated Geothermal Resource interest owner in the GRU. This includes required information to be included in the offer to participate and the amount of time the Allocated Geothermal Resource interest owner(s) have to consider the offer. It also establishes that the burden of proving the applicant's offer is not reasonable and/or in good faith upon the owner of the Allocated Geothermal Resources to be included in the GRU.

Rule 1310.c.(1) specifies certain notice requirements before a nonconsenting Allocated Geothermal Resource interest owner can be included in a GRU. The Commission recognizes that these are additional notice requirements to those found at Rule 1309.a.(4). The Deep Geothermal Operator can accomplish both sets of requirements in the same notice so long as the notice includes all informational requirements from both Rule 1309.a.(4) and Rule 1310.c.(1).

*Rule 1310.d.*

As with the equitable compensation issues described for Rule 1310.b., the Commission recognizes that the nascent nature of Geothermal Resource exploration and production also makes it difficult to determine appropriate factors for calculating cost recovery pursuant to Rule 1310.d. For the same reasons described above for Rule 1310.b., the



**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

Commission contemplates that the first permit applications for GRUs which propose inclusion of unleased Geothermal Resource owners will be subject to Commission hearings and Commission approval or denial. The Commission intends to issue written orders explaining what factors Deep Geothermal Operators and ECMC Staff should include or consider when calculating cost recovery.

*Rule 1310.e.*

The Commission added Rule 1310.e. to describe the process by which an applicant's request to include any nonconsenting Allocated Geothermal Resource interest owner(s) will be considered and approved or denied. The proposed means of equitable compensation will be considered concurrently with the evaluation of the GRU in all cases, either simultaneously with or subsequent to the permit application for Deep Geothermal Operations. The Commission intends Rules 1309 and Rule 1310 to work in tandem. When an applicant is aware that nonconsenting interest owners will be included in the proposed GRU, the applicant will submit their request under Rule 1310 concurrently with their permit application for GRU.

Note that, as discussed above for Rule 1310.b. (equitable compensation) and d. (cost recovery), the Commission contemplates that the first permit applications for GRUs which propose inclusion of unleased Geothermal Resource owners will be subject to Commission hearings and Commission approval or denial.

***Rule 1311***

The Commission added Rule 1311 to specify the processes by which an Operator can apply to convert an existing wellbore to a Deep Geothermal Well. The Commission intends that Rule 1311 is only applicable to converting existing wellbores to wellbores for the purposes of Deep Geothermal Operations.

The Commission intends, when an applicant applies to convert a Geothermal Science Well to a Deep Geothermal Well, the applicant will provide that information listed at Rule 1305.f.(1) (i.e., the informational requirements initially omitted from the permit application for a Geothermal Science Well). The Commission also intends that if the applicant performed the pre-application consultations required by Rule 1304 prior to obtaining a permit for a Geothermal Science Well, such pre-application consultations are not required for conversion to a Deep Geothermal Well, unless the Director or Commission determine it necessary. However, when applying to convert any other type of Well to a Deep Geothermal Well, the applicant will perform the pre-application consultations required by Rules 1303 and 1304 as part of its Rule 1311 application, unless the Director or Commission determine it unnecessary.

The Commission contemplates that all applications to convert a Well to Deep Geothermal Wells will be reviewed and approved or denied pursuant to procedures described at Rule 1305.e. Further, when considering an application to convert an existing wellbore to a Deep Geothermal Well, the Director or Commission may consider

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

the applicant's record of compliance with ECMC Rules and procedures. This may include whether the applicant has a history of multiple violations, site failures, and/or good faith efforts to address multiple violations by developing a company-wide culture of compliance.

***Rules 1312***

***Rule 1312.a.***

The Commission added Rule 1312 to address Geothermal Injection Wells. The Commission contemplates that some Deep Geothermal Operations will involve reinjecting Geothermal Fluids previously extracted from Deep Geothermal Well(s). However, the Commission currently does not have authority to authorize injection into Geothermal Injection Wells. Such wells are subject to the provisions of the Safe Drinking Water Act ("SDWA"), 42 U.S.C.A. §300f., *et seq.* Therefore, the Commission requires, at Rule 1312.a., that an Operator who intends to reinject Geothermal Fluids as part of its Deep Geothermal Operations will obtain the necessary EPA authorization under the SDWA. The Commission reserves the right to modify the rules on Geothermal Injection Wells if the Commission obtains appropriate regulatory primacy under the SDWA.

***Rule 1312.b.***

The Commission added Rule 1312.b. to specify that Operators operating Geothermal Injection Wells pursuant to approved Deep Geothermal Operations will comply with Rules 805 (Analytical requirements for injection fluid analyses), and 806.a. and b. (Timing of injection fluid sampling and analysis). The Commission requires that Operators of Geothermal Injection Wells perform sufficient sampling and analysis of reinjected Geothermal Fluids.

***Rule 1312.c.***

For the geophysical log requirement of 1312.c, the Commission intends that new Geothermal Injection Wells will have a suite of open-hole gamma ray, electrical resistivity, and density/porosity logs. In instances where open hole logs have not been or cannot be run, the Commission intends to allow operators to submit historic geophysical logs where available, so long as the log uses downhole measurement techniques to identify formation characteristics and fluid properties. The Director or Commission may require cased-hole pulsed neutron logs to fulfill this requirement. The requirement for gamma ray logging on a Geothermal Injection Well may be fulfilled by the requirements of Rule 408.r.

***Rule 1312.d.***

The Commission added Rule 1312.d. to require that, upon completion of a Geothermal Injection Well, the Deep Geothermal Operator will submit a Form 4 requesting authorization to begin injection. The informational requirements of the Form 4 are

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

intended to verify that the wellbore maintained integrity during the drilling process, passed a mechanical integrity test, that all casing and cementing is adequate, and that all fluids will be isolated during the injection process.

*Rule 1312.e. through g.*

The Commission added Rules 1312.e. through g. to address two forms of risk. The first pertains to fractures. The Commission requires an objective, performance-based standard for maximum allowable injection rates and pressures, by requiring that injection pressures not initiate any new fractures or propagate existing fractures. This standard will ensure that no fluids migrate out of the approved injection zone.

The second is the risk of induced seismicity. Building on the work done at the Mission Change Rulemaking in the 800-Series Rules, the Commission incorporated similar risk abatement measures as those found in the 800-Series—specifically at Rule 803.f. This includes seismic monitoring, furnishing seismic monitoring data, and potentially requiring traffic light protocols for seismicity. Further information can be found at the Rule 803.f. entry in the Mission Change Rulemaking Statement of Basis and Purpose on the Commission’s website:

<https://ecmc.state.co.us/documents/reg/Rules/Older/archive/Rules/2021/800%20900%201200%20Series%20-%20Mission%20Change%20SBP.pdf>

*Rule 1312.h. and i.*

The Commission added Rules 1312.h. and i. to restrict which types of Fluids may and may not be injected via Geothermal Injection Wells. In particular, the Commission intends that Rule 1312.h.(3) requires analysis of any proposed injectate prior to injection. To assure non-endangerment of aquifers used for Deep Geothermal Operations, the Operator will submit such analysis and obtain approval from the Director or other relevant authority prior to injection.

The Commission added Rule 1312.i. to specify when an Operator will provide an injected water analysis and injection zone analysis prior to injecting into a Geothermal Injection Well. To ensure non endangerment of the aquifer, the Commission intends that an Operator need only submit such analyses when an Operator proposes to inject any Fluids other than Geothermal Fluids or fresh or recycled water from the same formation.

***Rule 1313***

The Commission added Rule 1313 to provide Operators with geothermal-specific operations and reporting requirements. Rule 1313 also incorporates existing 400-Series operations and reporting requirements by reference.

*Rules 1313.a.*

## **ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**

### **Statement of Basis and Purpose**

The Commission added Rule 1313.a. to require monthly reporting on Deep Geothermal Wells, Fluids produced and injected, temperature and flow rate of Fluids, and, for Closed-Loop Geothermal Systems, Fluids lost to the subsurface.

#### *Rule 1313.b.*

The Commission added Rule 1313.b. to clarify that Form 4, Sundry Notices are applicable in the context of Deep Geothermal Operations. Rule 1313.c. incorporates Rules 404.a. and d. by reference. Rule 1313.b.(1) through (3) specify three, nonexclusive uses for a Form 4 in the context of Deep Geothermal Operations.

#### *Rules 1313.c. through r.*

The Commission added Rules 1313.c. through r. to incorporate by reference various provisions of the 400-Series Rules regarding Operations and Reporting. The Commission intends to extend its general operating and reporting structure and informational requirements to Deep Geothermal Operations.

The Commission added Rule 1313.e.(1) in recognition that current practices in geothermal wellbore design may vary from those cementing requirements incorporated by reference from Rule 408.f. The Commission intends that Deep Geothermal Operators will use the pump-and-plug method described at Rule 408.f. unless an alternative cementing method is proposed by the Deep Geothermal Operator and approved by the Director or Commission. The Deep Geothermal Operator will indicate in its Form 2 or with a Form 4, Sundry Notice its request for approval of an alternative cementing procedure.

### ***Rule 1314***

#### *Rules 1314.a. through d. and g. through k.*

The Commission added Rules 1314 to provide Operators with geothermal-specific safety and facility operations requirements. Rules 1314.d. through j. also incorporate existing 600-Series safety and facilities requirements by reference. Rule 1314.k incorporates by reference existing 1100-Series safety requirements for flowlines. The Commission intends to extend its general safety and facility requirements to Deep Geothermal Operations.

#### *Rule 1314.f.(1) and (2)*

Rule 1314.f.(1) and (2) specify setbacks and siting requirements for Deep Geothermal Wells and Geothermal Pad Surfaces. However, the Commission recognizes that an intended end use of some Deep Geothermal Operations may necessitate the Deep Geothermal Well, Location, Facility and/or Geothermal Pad Surface to be located near a building. For example, a Deep Geothermal Operator may demonstrate with technical evidence that, because an end use of the Deep Geothermal Operation is to heat building(s), the most beneficial design for the Operation may place the Deep Geothermal Well or Facility near the building(s) to be heated. During the Deep

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

Geothermal Rules hearings, the Commission also noted that Relevant Local Governments have siting authority and can impose more stringent setbacks than those required by Rule 1314.f.

***Rule 1315***

The Commission added Rule 1315 to provide Operators with geothermal reservoir monitoring requirements. The primary purpose of Rule 1315 is to ensure that Operators extract the Geothermal Resource at a sustainable rate. Therefore, Rule 1315.a. requires that Operators report the initial state of the Geothermal Resource upon Completion of a Deep Geothermal Well or a Geothermal Science Well. Rules 1315.b. and c. require regular reporting of the state of the Geothermal Resource. Rule 1315.d. authorizes the Director to require subsurface pressure measurements, when the Director deems it necessary. Rule 1315 is in line with the Geothermal Resource Act's requirement that the Commission encourage the maximum economic recovery of each Geothermal Resource, prevent its waste, and protect associated correlative rights. C.R.S. 37-90.5-102(b).

***Rule 1316***

The Commission added Rule 1316 to require Financial Assurance for Deep Geothermal Operations. As with Oil and Gas Operations, Deep Geothermal Operations present the state with risks of orphaned assets—including orphaned Deep Geothermal Wells. Further, it is prudent to require other forms of Financial Assurance such as general liability insurance. Rule 1316 is intended to accomplish this.

***Rule 1316.a.***

The Commission added Rule 1316.a. to specify that the Financial Assurance requirements of Rule 1316 apply to all permitted Deep Geothermal Wells in Colorado, except those Deep Geothermal Wells operated by Operators who qualify under Rule 702.d.(6). Rule 1316.a.(3) allows a Deep Geothermal Operator to demonstrate that, when operating a Deep Geothermal Well, Location, and/or Facility which is also subject to federal Financial Assurance, the required federal Financial Assurance is substantially equivalent to the Operator's state-level Financial Assurance obligations. However, the Commission intends that the Commission and/or Director have broad discretion to determine whether the federal Financial Assurance is substantially equivalent.

***Rule 1316.b.***

The Commission added Rule 1316.b. to specify the process by which an Operator will submit its Financial Assurance. Notably, the Operator will submit a Financial Assurance Plan to begin the Financial Assurance submission process. This is accomplished through a Form 3. This builds upon the Financial Assurance Rulemaking and extends it to Deep Geothermal Operators.

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

*Rules 1316.c. and d.*

The Commission added Rule 1316.c. to specify the contents of a Deep Geothermal Operator's Financial Assurance Plan. The Financial Assurance Plan will include the information requirements described at Rule 1316.c.(1).

The amount of Financial Assurance is set at Rule 1316.c.(2). Operators should note that, unlike Financial Assurance in the oil and gas context, all Deep Geothermal Wells will be secured by the Single Well Plugging and Abandonment Cost, as described in part c.(3) of the definition of Single Well Financial Assurance. Further, all Deep Geothermal Locations will be secured by the Location Reclamation Cost, as described in part c.(2) of the definition of Single Well Financial Assurance. In other words, the so-called "demonstrated costs" described at parts a. and d. of the definition of Single Well Financial Assurance are not applicable to Deep Geothermal Operations, Deep Geothermal Wells, and/or Deep Geothermal Locations. Rule 1316.c.(2).C. also specifies other forms of required Financial Assurance, such as Financial Assurance for remediation projects (pursuant to Rule 703.b.), seismic operations (pursuant to Rule 703.c.), and produced water transfer systems (pursuant to Rule 703.e.).

Rule 1316.d. requires Deep Geothermal Operators also comply with the general liability insurance requirements of Rule 705.

***Rule 1317***

The Commission added Rule 1317 to incorporate by reference various provisions of the 900-Series Rules regarding Environmental Impact Prevention. The Commission intends to extend its general environmental impact prevention requirements to Deep Geothermal Operations.

During rulemaking deliberations, the Commission considered testimony regarding requirements for Deep Geothermal Operators to exclusively utilize electrified or otherwise lowest-emission drilling and completion equipment. The Commission resolved that it prefers Deep Geothermal Operators to utilize the lowest-emitting equipment available to the Operator and encourages Operator to make site-specific evaluations to reduce pre-production emissions. However, the Commission specifically decided against prescribing specific technology so as to allow for flexibility in Deep Geothermal Operations.

***Rule 1318***

The Commission added Rule 1318 to incorporate by reference various provisions of the 1200-Series Rules regarding Protection of Wildlife Resources. The Commission intends to extend its general requirements for protection of wildlife resources to Deep Geothermal Operations.

***Rule 1319***

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

The Commission added Rule 1319 to incorporate by reference various provisions of the 1000-Series Rules regarding Reclamation. The Commission intends to extend its general requirements for Reclamation to Deep Geothermal Operations.

***Rule 1320***

The Commission added Rule 1320 to incorporate by reference various provisions of the 500-Series Rules regarding Practice and Procedure. The Commission intends to extend its general requirements for practice and procedure before the Commission to Deep Geothermal Operations.

Pursuant to Rule 1320.b., the Commission intends that the Director can refer any permit application for Deep Geothermal Operations or a Geothermal Resource Unit to the Commission when the Director determines that circumstances warrant a Commission hearing.

The Commission added Rule 1320.c. to address two situations: (1) When a Relevant Local Government or Surface Owner applies for an order, pursuant to Rules 211 and 503.g.(12).B., to require Plugging and Abandonment of a Deep Geothermal Well or Reclamation of a Deep Geothermal Location; and (2) When a Relevant Local Government or Surface Owner applies for an order to require Plugging and Abandonment of an Oil and Gas Well or Reclamation of an Oil and Gas Location and the Operator attempts to resist the order by asserting that the Oil and Gas Well or Oil and Gas Location is still used or useful.

In the first scenario, the Commission recognizes that requiring the applicant to certify, pursuant to Rule 503.g.(12).B.ii., that the Deep Geothermal Well has been a Low Producing Well for each year of the previous three years is not applicable in the Deep Geothermal Operations context. Unlike with Oil and Gas Wells, the Commission does not expect to see declined production toward the end of a Deep Geothermal Well's lifespan. Therefore, rather than requiring the applicant to certify that the Deep Geothermal Well has been a Low Producing Well, the Commission added Rule 1320.c.(1).A. requiring that the applicant certify that the Deep Geothermal Well has been an Inactive Well for each year of the previous three years.

In the second scenario, the Commission recognizes that, under Rule 503.g.(12).B.iii.bb., an Oil and Gas Operator may resist a Rule 211 order to Plug and Abandon an Oil and Gas Well or Reclaim an Oil and Gas Location by asserting that the Well or Location is still used or useful because the Operator plans to convert the Oil and Gas Well to a Deep Geothermal Well in the future. To avoid Operators indefinitely claiming future use or usefulness for Deep Geothermal Operations, the Commission added Rule 1320.c.(2). requiring that the Operator has applied to convert the Oil and Gas Well to a Deep Geothermal Well by the time the applicant files the application to Plug and Abandon the Well or Reclaim the Location. If the Operator has not made such an application to convert the Well to a Deep Geothermal Well by the time the applicant

**ECMC Deep Geothermal Rules – 2 C.C.R. § 404-1:1301 – 1320**  
**Statement of Basis and Purpose**

files a ripe application, there is a rebuttable presumption that the Oil and Gas Well is not used or useful for the purposes of Deep Geothermal Operations

However, to avoid unduly prejudicing Oil and Gas Operators who were not on notice of this rebuttable presumption until these Rules were promulgated, the Commission resolved that, for the first two years after promulgation, there is a rebuttable presumption that the Oil and Gas Well(s) will be utilized for Deep Geothermal Operations. Note that the Oil and Gas Operator, who is attempting to avoid Plugging and Abandonment or Reclamation, must affirmatively assert that they intend to convert the Well to a Deep Geothermal Well to get the benefit of the rebuttable presumption applicable in the first two years after promulgation.