

Aug. 15, 2022

**Via email**

Kellie Martinec, Rules Coordinator  
Office of General Counsel  
Railroad Commission of Texas  
rulescoordinator@rrc.texas.gov

**Re: Comments to Proposed Statewide Rule 66**

Dear Mrs. Martinec,

CrownQuest Operating appreciates the opportunity to comment on proposed rule 3.66 relating to Weather Emergency Preparedness Standards. Generally, we see two overarching issues with the proposed rule: (1) there is a lack of clarity and continuity throughout the rule; and (2) a failure to recognize and provide a defense to operators for matters beyond control.

The proposed rule contains varied definitions and lists relating to weatherization, how operators should weatherize, what a critical component is, etc. But, in spite of that, an operator cannot read Proposed Rule 3.66 and have a clear understanding of how the proposed rule applies to its facilities or how compliance with the Commission's expectations can be achieved. We recommend the Commission decide whether the proposed rule is intended to provide general ideas and concepts or specific standards, techniques, and actions.

We appreciate that Section (b)(7) acknowledges that operators are not responsible for weather events not reasonably foreseen. However, the proposed rule fails to recognize that our industry depends on electrical power to operate. This is a glaring omission. On well production sites alone, electrical use can easily be 0.9 GW<sup>1</sup>. Providing backup electrical generation to hundreds of thousands of locations would require massive capital investment in the billions of dollars. Neither Senate Bill 3 nor any other existing mandate authorizes the Commission to require backup generation for primary power, nor was the potential cost-benefit analysis done considering a capital expenditure or operating expense of this scale.<sup>2</sup> Losing power at locations because of a utility curtailment or loss should be exempted in Section (b)(7) as an event beyond an operator's control. The Commission should also explicitly state that Proposed Rule 3.66 does not require the installation of backup generation for primary power as weatherization.

**(b)(1) – Critical component definition**

CrownQuest recommends editing this definition to: "Any component, including components on equipment rented or leased . . ." Rented or leased equipment could be as complex as a compressor with thousands of components or as simple as a tank with only a few components. This inclusion would clarify that weatherization is required only for susceptible components, whether operator owned or rented/leased. Without this clarification, the definition

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<sup>1</sup> Calculation: 1.772 billion bbls of oil produced in 2021 (per the RRC). 24,300,000 bpd or 708,000 gpm of oil and water produced (using a WOR of 4 to 1). Assume 70% is for purchasing electrical power. The average TVD is 8,000 ft. The average density is 0.43 psi/ ft.  $Hhp = (gpm \times height \times density) / (1714 * efficiency)$  & 1 hhp = 0.746 kw. Total production electricity used =  $708,000 * 0.7 * 8000 * 0.43 / (1714 * .85) * 0.746 = 873,000$  kw or roughly .9MW.

<sup>2</sup> We recognize that Proposed Rule 3.66 does not currently require operators to maintain primary backup generation for facilities. However, it is not outlandish to assume that public comments might suggest this or that the legislature might seek to require it in the future. Adding the sentence above to the definition would highlight this additional obstacle an operator may face among the others currently listed and prevent potential future primary backup generation demands.

applies a higher standard to third-party equipment by requiring weatherization of the whole piece of equipment rather than the susceptible components.

**(b)(3) – Gas supply chain facility definition**

We recommend editing this definition to: “A facility regulated by the Commission under Texas Administration Code, Title 16, Chapters 3, 7, 8, and 18. This revised definition would mirror Section (b)(2), the definition of a gas pipeline facility. Maintaining consistency and clarity throughout the proposed rule is vitally important. The Commission and operators would be better off being able to reference the Commission’s own rules to determine which facilities are required to weatherize rather than leaving it open to interpretation.

**(b)(4) – Major weather-related forced stoppage definition**

We recommend the Commission edit this definition and base it solely on the existence of an energy emergency with the potential for load shedding events, as defined in Rule 3.65. As currently written, operators will only know if a “major” stoppage occurred after the fact as determined by a Commission employee’s discretion. The Commission has historically set clear standards for operators to meet and should continue to do so. The proposed definition is ambiguous and subject to the vagaries of individual interpretation.

**(b)(7) – Weather emergency definition**

1 - We recommend editing this definition to include: “A weather emergency does not include a facility losing power due to utility curtailment or loss that is outside an operator’s control.” Proposed Rule 3.66 glaringly fails to recognize that an operator depends on electrical power provided by a Transmission and Electric Distribution Utility over whom it has no control to sustain operations.

2 – We recommend the Commission edit this definition to clarify how it intends to notify operators of a weather emergency. A potential load shed event should not be an arbitrary designation. The proposed rule should contain clear and precise language identifying the circumstances warranting a weather emergency, such as a published alert from ERCOT or the Commission of potential load shedding events.

3 – We recommend the Commission edit this definition to specify the time (days rather than hours) required before a potential load shed constitutes a weather emergency or the duration of the issued alert from the Commission or ERCOT. Again, a weather emergency should not be an arbitrary designation but a critical event with a significant impact on public safety. Not every load-shedding event meets these criteria.

**(b)(8) – Weatherization definition**

1 – We recommend editing this definition to specify that the actions, implementations, and installations only apply to matters within operators’ control. As we mentioned in our comments on the definition of a weather emergency, instances beyond an operator’s control, e.g., a facility losing power due to utility curtailment or loss, should not be a part of the weatherization requirements.

2 – We recommend the Commission revisit the idea of weatherization throughout the proposed rule for consistency. For instance, Section (c)(2)(D) allows operators to define their weatherization identifications and practices. Later, Section (d)(1)(B) sets forth a required list of critical components to weatherize. These conflicting ideas make compliance incredibly difficult for operators. Proposed Rule 3.66 should either create clear guidelines for operators or adopt a full self-regulating approach based on specific facilities and well sites.

**(c)(2)(C) – Emergency operations planning**

We recommend editing this Section to: “emergency operations planning to identify . . .” A “risk-based approach” is a vague use of a non-technical term. If the Commission does not want to remove this phrase, then they should

define the term so that operators will have reasonable clarity on what the Commission expects operators to do in order to comply with this requirement.

**(c)(2)(D) – Weatherization methods**

1 – We recommend the Commission reconsider this Section. The phrase “may include but are not limited to” creates uncertainty for operators. It implies that the Commission has a defined weatherization standard but is unwilling to share it with operators. It also strongly suggests that the following list is required, but the Commission might enforce more. This Section does not provide a clear directive for operators to follow. This language also conflicts with the definition of weatherization in Section (b)(8). That definition is more open-ended and allows operators to customize their weatherization plan based on their operations. The Commission should clearly state within the proposed rule if they have specific weatherization standards they intend to enforce and then allow discussion of those standards in public comment.

2 – We recommend reworking the table of weather data by county. It is illogical to require operators to weatherize based on extreme high and low temperatures from decades past that have no causal relationship to reasonably foreseeable conditions. Instead, the Commission could supply each county’s highest and lowest 72-hour temperatures from the past ten years. The Commission should also consider the duration of extreme weather conditions. It is unreasonable to expect an operator to weatherize to an extreme temperature that only briefly persists. Also, we believe the table should not include arbitrary data on consecutive hours of freezing or frozen precipitation. Midland County, for example, would be required to weatherize for up to 30 hours of minus 12-degree F. frozen precipitation. The Commission requires operators to consider data with no specific value or direction in weatherization planning.

3 – We recommend editing this Section to include: “Applicable methods do not require acquisition of primary backup generation.” We believe the proposed rule needs to clarify that backup generation for primary power is not required weatherization.

4 – We recommend editing this Section to clarify that the methods are exclusive to matters within operators’ control, as we mentioned with respect to Section (b)(8) the definition of weatherization.

5 – We recommend the Commission revisit the methods mentioned in Sections (c)(2)(D)(i-xx). The industry standard and most successful method of cold-weather weatherization is utilizing a heater treater or burner.<sup>3</sup> It is concerning as to the Commission’s intent for how they plan to manage and enforce the weatherization if they are not considering the best and most common form of weatherization for tank batteries in any of the rule’s text.

**(c)(2)(D)(iv) – Securing personnel including contractors**

We believe this Section would no longer be applicable once clarifying that weatherization and weatherization methods are only required for matters within operators’ control. If this remains a standard, then it will likely cause

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<sup>3</sup> CrownQuest’s calculation to determine lit heater treater (HT) performance using typical temperatures, pressures, and equipment size. We modeled a steady state liquid volume facility using Promax, a widely accepted calculation and modeling software. Metrics used in the calculation: 125 feet of 2-inch above-ground carbon steel pipe, an ambient temperature of -12 degrees Fahrenheit, HT heated to 135 degrees Fahrenheit, HT heat duty of 12,000 Btu/h, HT pressure of 80 PSIG, produced water composition of 98% water and 2% NaCl, 40 API gravity oil. After running the model, we found that the heater treater effectively keeps the fluid above freezing (even with extremely cold ambient temperatures). The model shows that production at 5 BWPD and 8 BOPD can remain above freezing if the HT fluid is at 135 degrees Fahrenheit. Note that higher volume producing facilities may have fluid coming into the header upwards of 140 degrees Fahrenheit, thus being more than sufficient to stay above freezing by the time it reaches the tanks. This model proves that the heater treater can supplement the necessary heat needed if freezing fluid may become an issue. Reference the endnotes to see our flow sheet.<sup>1</sup>

the opposite effect. Hoarding of contracted labor and equipment will not allow contractors to go to the appropriate locations that need work done during a weather emergency.

**(c)(2)(D)(xv) – Availability and inventory of sand or gravel**

We believe this Section would no longer be applicable once clarifying that weatherization and weatherization methods are only required for matters within operators’ control. It is impractical and illogical to assume it is an operator’s responsibility to procure road equipment and ensure accessibility throughout a weather emergency when TxDOT maintains most roads that become impassable.

**(c)(2)(D)(xvi) – Procuring third-party services**

We believe this Section would no longer be applicable once clarifying that weatherization and weatherization methods are only required for matters within operators’ control. “Third-party services” are, by definition, not within the operator’s control. Therefore, they should not be included within a weatherization standard for an operator, especially considering this rule could encompass hundreds of thousands of sites. If this remains a standard, it will likely cause the opposite effect of hoarding contracted labor and equipment to avoid falling afoul of these proposed rules and not allowing contractors to go to the appropriate locations that need work done during a weather emergency.

**(c)(2)(D)(xiii) – Implementing redundancies for continued operations**

We believe this Section is not within the Commission’s regulatory scope as provided by the legislature. The Commission does not have the authority to require operators to maintain production. Alternatively, it is illogical to require operators to maintain a massive and costly inventory of backup equipment for every potential failure point. If the Commission makes its weatherization standard overly broad and costly, then it incentivizes operators to shut in before a weather event arrives.

**(c)(2)(D)(xix) – Coordinating with local authorities**

We believe this Section would no longer be applicable once clarifying that weatherization and weatherization methods are only required for matters within operators’ control. What local authorities choose to do in a weather emergency is out of the operator’s control and should not be included as a weatherization standard.

**(c)(2)(D)(xx) – Burying subsurface piping**

If this is included in a weatherization standard, we recommend editing this Section to be aligned with readily available data about the average frost line in Texas or specific frost lines in individual counties. For example, the City of Midland reports the frost line as 12 inches. Burying piping four feet deep may be a good weatherization practice in North Dakota, where the frost line is studied and tracked by the National Weather Service. However, requiring that standard in Texas is not scientifically based and should not be required without actual data supporting it.

**(d) – Weather Emergency Readiness Attestation**

Neither Senate Bill 3 nor the Texas Natural Resources Code mandate the requirements listed in Section (d). Therefore, we believe the Commission should strike the entire Section from the proposed rule. The Section references the Commission’s legal right to fine filers for false applications, reports, and documents but fails to cite its authority for requiring this attestation.

**(d)(1)(B) – Attestation activity requirements**

Due to the foregoing reasons, CrownQuest believes the Commission should strike Section (d) from the rule. However, we recommend the following changes if the Commission expects to keep it in place.



1 - The Commission should make clear within the proposed rule whether there is a minimum list of critical components concerning which they will enforce weatherization requirements, as Sections (d)(1)(B)(i-xv)<sup>3</sup> imply. We recommend specifying the list contained in the definition of a critical component (Section (b)(1)). The proposed rule does not utilize the list of requirements contained in Section (d)(1)(B) in any other part of the rule. Section (c)(2)(D) conversely allows operators to personally assess the critical components of their facilities based on a list of possible practices. Operators cannot reasonably comply with this proposed rule as it contains both specific lists and vague requirements relating to the same matters.

2 – The Commission should create a standardized list of expected practices for each type of facility it regulates (e.g., well sites with rod pumps, well sites with ESPs, tank batteries)

3 – The Commission should better categorize Sections (d)(1)(B)(i-xv) because the Sections currently mix terminology used by different industry segments. The Commission should not create additional uncertainty in the rule by utilizing gas plant or compression terms that do not generally apply to well sites and tank batteries. The Commission should review the following Sections:

(d)(1)(B)(i) – Process piping is generally used in plants and not in oil and gas operations. Vessels are not necessarily critical in oil and gas operations. If the Commission requires them to be a critical component, it would generally not be the vessel itself but the parts of the vessel.

(d)(1)(B)(ii) – Process fluids are not equipment or components. It is unclear what the Commission intended or what actions an operator could take that would satisfy the requirement in this respect.

(d)(1)(B)(iii) – Fuel gas systems are generally plant or engine-related.

(d)(1)(B)(iv) – Tankage, terminals, and distribution are all quite generic terms that would be difficult to fit into the definition of a critical component. Specific components might be critical, but a 500-barrel tank is unlikely to be a critical component per its proposed definition. This Section could refer to an oil station, but the industry generally does not use the term “terminal” for anything other than oil terminals i.e., Tank Farms. Only regulated utilities such as power or gas companies commonly use the term “distribution.”

(d)(1)(B)(v) – Instrument air management is a practice and not a system where operators take actions for weatherization.

(d)(1)(B)(vi) – Electrical management systems are a practice and not a system where operators take actions for weatherization.

(d)(1)(B)(vii) – Water Management Systems are a practice and not a system where operators take actions for weatherization.

(d)(1)(B)(viii) – Utility Connections are not a standard term for oil and gas operators other than the power connection, which are generally owned by the utility company. The Commission should define this term if they mean this differently. The industry does not generally need to weatherize primary power electrical connections, nor do we see a reason to do so.

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<sup>3</sup> Proposed Rule 3.66 asks for an unreasonable and undefined amount of data that the Commission can only intend to use in hindsight for enforcement actions. This type of regulatory burden is not in keeping with how the Commission typically operates. Our industry has been fighting the EPA over a similar approach of indiscernible rules with no clear benefits. The Commission should not emulate the EPA's ineffective and burdensome regulatory strategies.

(d)(1)(B)(ix) – Pumps, compressors, and turbines are utilized in multiple contexts. It is unclear whether the Commission is trying to encompass both a rod pump in a well at 10,000 feet on a pump jack and a high-pressure NGL pump at a compressor station under the same term. It is difficult to understand whether turbines (primarily used in plants or in conjunction with an engine to produce electricity), compressors, and pumps are separate components or some connection the Commission envisions. Clarity in a rule of this significance and cost is needed for operators.

(d)(1)(B)(x) – Air intake systems are a practice and not a system where operators take actions for weatherization.

(d)(1)(B)(xi) – Chemical tanks and porta feeds are not necessarily critical components per the proposed definition in Section (b)(1). For example, a methanol injection tote does not need weatherization, and porta feeds are fluids used for weatherization purposes. However, this rule would require operators to take action concerning those tanks. The freezing points for many oil field chemicals, such as corrosion inhibitors or defoamers, are so low that it is not reasonable to consider them under the rule. The proposed rule's current language will require immense documentation and cost, with little or no additional weatherization benefit.

(d)(1)(B)(xiv) – Maintenance preparation and readiness are a practice and not a system where operators take actions for weatherization.

(d)(1)(B)(xv) – Closed loop glycol heaters and tracing systems are typically unrelated. It is unclear whether the Commission considers the two items to be related or whether they are both just listed under this Section. Clarity on the Commission's intent is necessary here. If the Commission intends for heat tracing to be a generic term for any piping at any location, then the burners and continuing operations should be included as an alternative. They generally work in the same conditions and circumstances for producing well sites and tank batteries.

**(d)(2) – Confidentiality of the Weather Emergency Readiness Attestation**

Again, CrownQuest believes the Commission should strike Section (d) from the rule. However, if it intends to keep Section (d), then we highly recommend it revisit this Section to safeguard operators' confidentiality. The electricity supply chain map is considered confidential because it contains information that criminals and terrorists could use against the state. Facilities on the confidential map should continue to receive that same level of protection regardless of what information the Commission requests from the operator. It is unconscionable that the Commission would require operators to document facilities and operations the Commission has deemed critical, but then be required to defend the confidentiality of that critical information. If the facilities addressed in Section (a) are truly critical, then the Commission should apply the same information protections the state has granted to the electricity supply chain map.

**(f)(2) – Contracting with an engineer**

We recommend editing this Section to: "contract with a qualified person with related experience, or consult with a Commission employee, to assess ...." The Commission should allow for consultation with the Commission staff rather than force operators to contract with a third-party engineer. Requiring operators to use a private party to recommend and verify may be good government practice, but it is not good public policy when it is the only option. Over the next few years, finding and securing a "qualified engineer" may be difficult as weatherization in Texas is generally new. Operators should always have the option to consult with the Commission for approved plans. The Commission should not relegate operators to contract external de facto regulators, nor create new cottage industries of consultants. There is significant potential for conflicts of interest where a third-party engineer is a sole option. A private party recommendation should be in conjunction with rather than in lieu of the Commission's orders.

Thank you for your consideration of our comments to Proposed Rule 3.66. Please don't hesitate to contact the undersigned should you have any questions.

Sincerely,

Luke Dunn  
 Vice President of Engineering and Operations

Endnotes

