

ILLINOIS POLLUTION CONTROL BOARD  
August 25, 2016

CALPINE CORPORATION )  
(ZION ENERGY CENTER), )  
 )  
Complainant, )  
 )  
v. ) PCB 16-112  
 ) (Variance – Air)  
ILLINOIS ENVIRONMENTAL )  
PROTECTION AGENCY, )  
 )  
Respondent. )

ORDER OF THE BOARD (by G.M. Keenan):

On August 8, 2016, Calpine Corporation petitioned for relief from Board regulations on sulfur dioxide emissions for its three simple-cycle natural gas-fired turbines in Zion, Lake County (known as “Zion Energy Center” or the “Facility”). This filing amended Calpine Corporation’s previous variance petition.<sup>1</sup> This Board order finds that the amended petition meets the Board’s filing and content requirements. Therefore, the Board accepts the amended petition.

**CALPINE’S AMENDED PETITION MEETS BOARD REQUIREMENTS**

Calpine’s<sup>2</sup> three simple-cycle turbines constituting Zion Energy Center usually burn natural gas to generate electricity, but occasionally burn distillate oil. When burning distillate oil, the turbines emit sulfur dioxide. The Facility currently has 960,000 gallons of distillate oil with a sulfur content of 113 parts per million. The turbines have no sulfur dioxide control technology; the fuel’s sulfur content determines sulfur dioxide emissions. Zion Energy Center is a “peaker” plant: it operates only when electricity demand is high. Due to its irregular operation, the Facility does not have a constant supply of natural gas at its disposal. When it is asked to operate but does not have access to natural gas, the Facility burns its backup supply of distillate oil instead.<sup>3</sup>

Zion Energy Center’s distillate oil tank contains a mixture of ultra-low sulfur fuel (at or below 15 parts per million (ppm) sulfur) and fuel with higher sulfur content. Combined, the roughly 960,000 gallons of distillate oil presently in the tank at the Facility has 113 ppm sulfur. The Facility can run for about 68.6 hours on the amount of distillate oil in the tank. Calpine

<sup>1</sup> See Calpine Corp. (Zion Energy Center) v. IEPA, PCB 16-112 (July 7, 2016) (Board order directing the petitioner to correct procedural deficiencies in its original petition).

<sup>2</sup> Calpine Operating Services Company, Inc., a subsidiary of Calpine Corporation, operates Zion Energy Center, but the distinction between the two entities is not relevant for this order. The order collectively refers to the owner and operator simply as “Calpine.”

<sup>3</sup> Pet. at 4–8.

estimates that the Facility will run on distillate oil about 12 hours per year, so the existing quantity of fuel will not be consumed in the normal course of business for at least five years.<sup>4</sup>

Section 214.161 of the Board's rules states that as of January 1, 2017, the sulfur content of all distillate oil fuel used must not exceed 15 ppm.<sup>5</sup> The Board changed this rule last year in a rulemaking meant to meet Illinois' obligation to submit a state implementation plan to the U.S. Environmental Protection Agency to comply with the 2010 National Ambient Air Quality Standards (NAAQS) for sulfur dioxide.<sup>6</sup>

Following Calpine's normal course of business, it would not expend its existing supply of distillate oil (with 113 ppm sulfur) before the 15 ppm restriction begins on January 1, 2017. For this reason, it has petitioned the Board for a variance from that rule. Calpine argues it cannot achieve compliance with the rule because its two options—combusting all stored fuel and draining the fuel—are unreasonable. Instead, Calpine proposes that the Board allow the Facility to use fuel with greater than 15 ppm sulfur content until January 1, 2022, among other proposed conditions. Calpine claims that this variance would yield 0.77 additional tons of sulfur dioxide emissions.<sup>7</sup>

The Board will accept the petition if it meets certain procedural and content requirements listed in Section 104 of the Board's procedural rules.<sup>8</sup> The Board finds that the amended petition meets these procedural and content requirements. The Board does not address in this order the merits of Calpine's request or whether its petition provided sufficient information. Calpine may be directed to provide additional information concerning its request.

### **ADMINISTRATIVE MATTERS**

Calpine must provide notice of its amended petition in a newspaper of general circulation in Lake County within 14 days of filing.<sup>9</sup> Calpine's newspaper notice for its amended petition was required by August 22, 2016. Calpine must file with the Board proof of publication within 21 days of publishing notice.<sup>10</sup>

The Agency must file a recommendation concerning the variance within 45 days after the petition is filed or 30 days before a scheduled hearing, whichever is earlier.<sup>11</sup> The Agency must file its recommendation for this variance by September 22, 2016. Within 14 days after being served the recommendation, Calpine may respond to the Agency or amend its petition.<sup>12</sup>

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<sup>4</sup> *Id.*

<sup>5</sup> 35 Ill. Adm. Code Section 214.161.

<sup>6</sup> See In the Matter of: Amendments to 35 Ill. Adm. Code Part 214, Sulfur Limitations, Part 217, Nitrogen Oxides Emissions, and Part 225, Control of Emissions from Large Combustion Sources, R15-21 (Oct. 1, 2015) (Second Notice order).

<sup>7</sup> Pet. at 10–13.

<sup>8</sup> 35 Ill. Adm. Code 104.204

<sup>9</sup> 415 ICLS 5/37(a) (2014); 35 Ill. Adm. Code 104.214; Calpine Corp. (Zion Energy Center) v. IEPA, PCB 16-112 (July 7, 2016) (directing Calpine to republish notice after filing its amended petition).

<sup>10</sup> 35 Ill. Adm. Code 104.214(f).

<sup>11</sup> 35 Ill. Adm. Code 104.216.

<sup>12</sup> 35 Ill. Adm. Code 104.220.

Calpine waives its right to a hearing under 35 Ill. Adm. Code 104.204(n).<sup>13</sup> The Board will hold a hearing if the Agency or any other person files an objection to the variance within 21 days after newspaper notice was published or the Board, in its discretion, decides to hold a hearing.<sup>14</sup>

The assigned hearing officer is responsible for guiding the parties toward prompt resolution of this matter through status calls and hearing officer orders as appropriate. Hearings, if necessary, will be scheduled and completed in a timely manner, consistent with the decision deadline, which only Calpine may extend by waiver. If the Board does not take final action by the decision deadline, Calpine may deem its requested variance granted for a period not to exceed one year.<sup>15</sup> Currently, the decision deadline is December 6, 2016 (120 days after Calpine filed its amended petition).<sup>16</sup> The Board meeting immediately before the decision deadline is scheduled for December 1, 2016.

IT IS SO ORDERED.

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on August 25, 2016, by a vote of 4-0.



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John T. Therriault, Clerk  
Illinois Pollution Control Board

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<sup>13</sup> Pet. at 18–19.

<sup>14</sup> 415 ILCS 5/37(a) (2014); 35 Ill. Adm. Code 104.224, 104.234.

<sup>15</sup> See 415 ILCS 5/38(a) (2014).

<sup>16</sup> See 35 Ill. Adm. Code 104.232.