



Travis Ritchie <travis.ritchie@sierraclub.org>

Request for Notice re Air Permit V95-007 (Ocotillo Power Plant)

Henry Krautter - AQDX <Henry.Krautter@mail.maricopa.gov>
To: Travis Ritchie <travis.ritchie@sierraclub.org>

Wed, Dec 17, 2014 at 9:18 AM

Hello Travis,

We're figuring probably around the end of January.

Enjoy your holidays.

Henry Krautter

Title V - Permitting Division

Maricopa County Air Quality Department

1001 N. Central Ave., Suite 400

Phoenix, AZ 85004

602-506-7302

602-506-6985 (*fax*)

Henry.Krautter@mail.maricopa.gov

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CLEAN AIR
MAKE
MORE



From: Travis Ritchie [mailto:travis.ritchie@sierraclub.org]

Sent: Wednesday, December 17, 2014 10:16 AM

To: Henry Krautter - AQDX

Subject: Re: Request for Notice re Air Permit V95-007 (Ocotillo Power Plant)

Hello Henry,

Any status update on the Ocotillo PSD permit? I'm trying to plan my Calendar out a few weeks for the holidays, and it would be helpful to know if you expect the draft permit before the New Year.

Thanks, and happy holidays.

Travis

—

Travis Ritchie
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On Wed, Nov 19, 2014 at 8:01 AM, Henry Krautter - AQDX <Henry.Krautter@mail.maricopa.gov> wrote:

Hi Travis,

Thanks for the info. We had some problems with my e-mail address so it has been changed. This e-mail is from the new one.

Henry Krautter
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-----Original Message-----

From: Travis Ritchie [<mailto:travis.ritchie@sierraclub.org>]
Sent: Tuesday, November 18, 2014 1:37 PM
To: Henry Krautter - AQDX

Subject: Re: Request for Notice re Air Permit V95-007 (Ocotillo Power Plant)

Hi Henry,

Thanks for your email and the opportunity to provide input. I have not prepared any comments specifically for the Ocotillo plant at this time. I would like to reserve the opportunity to provide more formal comments on the draft permit during the public comment period.

However, I can give you some of the quick issues that jumped out at me from reviewing the application. Also, I am attaching two sets of comments that Sierra Club has submitted in the past for similar projects to give you an idea of our concerns.

Here is a brief summary of the main points made in those comments that are applicable to the Ocotillo project:

(1) The proposed GHG limit of 1,690 lb CO₂/MWh (gross) is much higher than other projects using the same turbine technology. If you research some of the recently permitted plants, you will find much lower limits. For example, El Paso Electric's Montana Power Plant, which is the same LMS 100 turbine, has a final permitted limit of 1,100 lb CO₂/MWh (gross). This is lower than the draft limit cited by Ocotillo.

(See El Paso Montana Final Permit at

<http://www.epa.gov/earth1r6/6pd/air/pd-r/ghg/el-paso-electric-final-permit.pdf>).

Related to this topic, Sierra Club recently submitted comments on the proposed NSPS standard where we had an opportunity to look at actual emission data from CTs built since 2007. The attached excerpt from those comments includes a table showing that more than 90% of CT units that have come online since 2007 are actually emitting at a rate lower than 1600 lb CO₂/MWh (gross). That chart is derived from CAMD data. The workbook for that data is included in a link in the footnote below the chart.

(2) Operating limits should be imposed. Page 16 of the application notes that the new turbines (GT3-GT7) will not have any operating limits, but will have specific emissions caps, but not any caps on GHG emissions. Combustion turbines are inherently lower-efficiency than combined cycle units. This trade off in efficiency (and emissions) may be acceptable under certain circumstances if the plant is not going to run very often, such as a peaking unit. However, many of the CT projects we have reviewed would include operating limits up to 5,000 hours annually, or more. That's not a peaking unit - it's practically a baseload unit at that rate, and if nothing else is an intermediate unit. If the applicant really wants to run the plant that much, then they should look at a more efficient combined-cycle. Modern combined-cycle technology allows for rapid start (10 min) and quick ramping capability. The proposed Ocotillo plant is over 500 MW. At that size there are numerous combined-cycle options with much lower emission rates.

(3) Energy storage technology should be considered as part of the BACT analysis. Energy storage technology has developed rapidly in recent months, with several utility-scale projects under development. Energy storage is an ideal application for the need in Arizona to match higher renewable penetration. (See attached Red Gate comments. Texas is dealing with similar renewable penetration issues.) At a minimum, the BACT analysis should consider energy storage as technically feasible and consider whether any adverse economic impacts would prevent its adoption.

—

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On Mon, Nov 17, 2014 at 1:19 PM, Henry Krautter - AQDX <HenryKrautter@mail.maricopa.gov> wrote:

> Hello Travis,

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> We are going over the BACT analysis for GHGs now, if you have comments we would be glad to look them over along with the BACT analysis. You may also submit them during the public notice period.

>

> Thanks,

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> Henry Krautter
> Title V - Permitting Division
> Maricopa County Air Quality Department
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> Phoenix, AZ 85004
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> -----Original Message-----

> From: Travis Ritchie [<mailto:travis.ritchie@sierraclub.org>]
> Sent: Wednesday, October 22, 2014 4:18 PM
> To: Henry Krautter - AQDX
> Subject: Re: Request for Notice re Air Permit V95-007 (Ocotillo Power
> Plant)

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> Thanks Henry. One more question. Is MCAQD the permitting authority for the GHG increase? I see that there
> is a 2011 delegation agreement between EPA and ADEQ, but it's not clear whether that covers Maricopa County.
>

> --
> Travis Ritchie
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> On Wed, Oct 22, 2014 at 3:32 PM, Henry Krautter - AQDX <HenryKrautter@mail.maricopa.gov> wrote:
>> Thanks Travis. I'll keep you updated.

>>
>> Henry Krautter
>> Title V - Permitting Division
>> Maricopa County Air Quality Department
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>> -----Original Message-----

>> From: Travis Ritchie [<mailto:travis.ritchie@sierraclub.org>]
>> Sent: Wednesday, October 22, 2014 1:37 PM
>> To: Henry Krautter - AQDX
>> Subject: Request for Notice re Air Permit V95-007 (Ocotillo Power
>> Plant)

>>
>> Henry,
>> Thanks for speaking with me just now about the pending permit for the Ocotillo Power Plant. As you
>> suggested, I'm sending you my email address with a request to please add me to the service list. I am
>> interested in providing public comment on the draft permit when it is issued.
>> Thank you,
>> Travis Ritchie

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>> --
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