BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of Compliance with ) Supplemental Order Clarifying Ongoing Conditions of the Site Certificate ) Requirements under Conditions for the Klamath Cogeneration Project related to Carbon Dioxide Emissions ) Section IV.B of the Site Certificate

Summary

The Energy Facility Siting Council ("Council") approves the clarifications set forth below, regarding ongoing obligations of Klamath Energy LLC (KE) under the Site Certificate conditions related to carbon dioxide offsets to be provided by the Klamath Cogeneration Project (KCP). Specifically, the Council concurs with proposed clarifications regarding the requirements for reconciliation every five years by providing supplemental carbon dioxide offset payments to the Oregon Climate Trust in case of any shortfall in sale of useful thermal energy to the Collins Wood Products facility. The Council further makes the requested finding that contingency funds for the shortfall in performance of carbon dioxide offset projects provided in condition IV.B.6 of the site certificate can be withdrawn in full at any time after KE determines that the mitigation projections are not likely to be met and provided to the Oregon Climate Trust. The Council further finds that KE has met all ongoing obligations under conditions IV.B.8, 9 and 10 of the site certificate regarding monitoring and reporting of carbon dioxide offset projects by reporting that those projects are no longer effective, so that further monitoring and reporting under those conditions is no longer required.

A. Background

On July 2, 2008 the Oregon Department of Energy ("ODOE" or "Department") received a letter from IBERDROLA RENEWABLES, Inc. (the "IBR letter"), requesting clarification regarding the one-time payment option for the Carbon Dioxide shortfall for operating years 6 through 30 and general clarification regarding the Council’s anticipated supplemental order.1 IBR is the parent company of KE, which holds the site certificate for the KCP.

The KCP is a nominal 500 megawatt (MW) natural gas-fired electric cogeneration plant. The site is located approximately 4.5 miles south and west of the city of Klamath Falls, on land adjacent to the Collins Wood Products facility. In addition to its electric generation, the facility provides cogeneratated process steam to the wood products facility.

1 IBR July 2, 2008 letter from Mike Roberts to Adam Bless, "Clarifications Regarding the One-Time Payment Option for the Carbon Dioxide (CO2) Shortfall for Operating Years 6 through 30 and General Clarifications Regarding the Oregon Energy Facility Siting Council’s Anticipated Supplemental Order." A copy is attached hereto and incorporated herein as Attachment A.
The KCP site certificate was issued before the Council adopted rules for carbon dioxide emissions at OAR 345 Division 24. In 1997, the Council held a contested case to determine which of three competing generation projects would be exempted from the Council’s Need for Facility Standard, which applied to electric generating plants at the time. The KCP was awarded the exemption, based on a diverse portfolio of carbon dioxide offset projects. Therefore, the Council’s current carbon dioxide rules at OAR Chapter 345, Division 24 do not apply to the KCP site certificate. However, the site certificate contains extensive conditions at Section IV.B, specifying carbon dioxideoffset requirements that are consistent with the findings that the Council made in its Order in the 1997 contested case.

The sale of process steam to the Collins facility is considered a carbon dioxideoffset because it displaces steam that Collins would otherwise produce in stand-alone boilers. Condition IV.B.1 of the site certificate states that the KCP will supply an annual average of 200,000 pounds per hour of steam to Collins, at a specific temperature and pressure.

On June 30, 2007, KE reported that it had supplied an average of only about 70,000 pounds per hour to Collins over its first five years of operation. In an Order on September 21, 2007 (a copy of which is attached hereto and incorporated herein as Attachment B), the Council found that Collins was unlikely to accept steam at a greater rate during the KCP’s remaining life, and approved a plan to make up the shortfall in steam sales over the lifetime of the plant. The plan was based on the assumption that steam sales over years 6 through 30 would average the same hourly rate that was achieved in years 1 through 5. The Council approved a one-time payment of approximately $2.4 million to the Oregon Climate Trust, as a replacement for the offsets lost by the shortfall in steam sales.

As noted above, the steam sales to Collins were but one part of a diverse portfolio of carbon dioxideoffset projects called for in the KCP site certificate. Other projects included solar energy promotion in Southeast Asia, promotion of geothermal heating in Klamath Falls, capture of methane gas for beneficial use, and funds to the Oregon Forest Resources Trust for reforestation. Condition IV.B.8 of the site certificate requires KE to make available up to $50,000 per year for monitoring and reporting on the performance of these offset projects. Condition IV.B.10 requires KE to annually report the performance of these projects to the Council and provide a more comprehensive assessment every five years. Condition IV.B.6 creates a $300,000 contingency fund (in 1996 dollars) to be used if the above offset projects (other than the steam to Collins) fail to reach certain performance goals.

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2 The Need for Facility Standard no longer applies to generating plants, under ORS 469.501.
3 The July 2, 2008 IBR letter correctly clarifies that the precise average of steam supply to Collins over the first five years of operation was 67,105 pounds per hour.
4 Consistent with condition IV.B.1, the Council allowed KE to take credit for thermal efficiency improvements at KCP as a means of reducing the shortfall in steam sales to Collins.
5 Because the site certificate pre-dates the current CO2 mitigation rules at OAR Chapter 345, Division 24, the Council had latitude to adopt an offset replacement plan that was not identical to current rules. However, the plan approved in the September 21, 2007 Order was consistent in principle with those rules.
KE commenced operation on July 1, 2001 and submitted its five year report in July 2006. KE reported at the end of its first five year period that none of the above offset projects had achieved any significant success, and there were virtually no expectations of greater success in the future.

Therefore, in its July 2, 2008 letter, IBR requests clarification regarding ongoing requirements under conditions IV.B.1, IV.B.6, IV.B.8, IV.B.9, IV.B.10 and IV.B.11. The IBR letter is not a request for amendment because no change in any condition is requested. Rather, IBR requests certain stipulations at a finer level of detail than is provided by the conditions.

B. IBR Request for Clarification

B.1 Five Year Reconciliation (“true up”) for Steam Sales to Collins

Condition IV.B.1 of the site certificate requires KE to report every five years on its hourly rate of steam sale to Collins, averaged over the five year period, for life of the facility. If steam sales fall short of the 200,000 pound per hour rate that was the basis for the site certificate, then condition IV.B.1 requires KE to provide other offsets sufficient to make up the shortfall for that 5 year period. This is referred to as the “true up”. In its September 21, 2007 Order, the Council adjusted the baseline rate of steam sales to Collins to match actual steam sales during the first five years. This was stated as 70,000 pounds per hour in the September 21, 2007 Order but is clarified in IBR’s July 2, 2008 letter to be more precisely 67,105 pounds per hour.

IBR’s July 2, 2008 addresses the requirements under condition IV.B.1 and the Council’s September 21, 2007 Order if hourly steam sales in future five year periods fall short of 67,105 pounds per hour. Specifically, IBR requests the following clarifications:

1) The focus of each 5-year verification will be KE’s average annual steam sales. Any CO2 shortfall for the 5 year period will be calculated based on the energy delivered to Collins and the associated fuel that is displaced. The method used to calculated any CO2 shortfall will be the same as was used in Table A in the email sent on November 12, 2007 from PPM to Adam Bless (hereinafter 11/12/07 memo) (a copy of which is attached hereto and incorporated herein as Attachment C).  

2) Any future improvement projects that are implemented by KE can be used to reduce future shortfalls in CO2 offsets. Shortfall reductions due to future improvement projects will be calculated using the same approach as was used in Table B of PPM’s 11/12/07 memo to Adam Bless.

3) KE steam sales and future improvement projects are the only parameters that will change for purposes of the 5 year calculations. Reductions to the CO2 shortfall for years 6

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6 In its order, the Council authorized PPM and ODOE to calculate the precise payment requirement before sending the funds to the Climate Trust. The 11/12/07 memo from PPM contains those final calculations. PPM was the parent company of KE before PPM was purchased by IBR.
through 30 that are based on KE's original 10 improvement projects and reduced levels of nitrogen oxides (NOx) and particulates (PM10) emissions will remain fixed. These reductions were calculated in Tables B and C of PPM's 11/12/07 memo to Adam Bless.

4) The average steam sales amount to Collins during years 1 through 5, which was used as the basis to calculate the gross CO2 shortfall for years 6 through 30, was the energy equivalent of 67,105 pounds per hour at a pressure of 375 psig and 455 degrees F. This average steam sales level of 67,105 pounds per hour at 375 psig and 455 degrees F will be the break-even rate for future 5 year verifications.

5) If average steam sales during the 5 year period under review exceed the break even rate of 67,105 pounds per hour, then no shortfall will exist and no additional CO2 payments will be required for that 5 year interval. While KE will not receive any refunds at any time of funds already paid to meet its CO2 obligations, KE can carry forward steam sales and future plant heat rate improvement projects. Should steam sales in a 5 year period exceed the break even rate, each ton of associated CO2 offsets can be used as a credit against steam sale shortfalls in a future 5 year period. Any reductions in CO2 shortfall from future KE improvement projects will be calculated as pro-rated credits in the 5 year period in which those projects were implemented (based on the date within the 5 year period that the improvement project became operational), and as full credits in any future 5 year periods that are subsequent to the one in which the improvements were implemented. Improvement project credits not applied in a given 5 year cycle can be carried forward to subsequent 5 year periods.\(^7\)

6) If average steam sales to Collins during a 5 year period are less than the break even rate and there is a net shortfall in CO2 offsets for this 5 year period after applying:

   a) the effect of any improvement projects implemented in previous 5 year periods,
   b) any carry forward credits from steam sales above the break even rate in previous 5 year periods,
   c) any carry forward credits from improvement projects implemented in a previous 5 year period but not required to offset CO2 shortfalls in those periods, and
   d) pro-rated reductions in CO2 shortfall from improvement projects implemented during the 5 year period under review,

then KE will owe a payment for the 5 year period under review, based on the net CO2 shortfall in tons for that period.

7) If a payment is due for a given 5 year period, the applicable payment rate in dollars per ton of CO2 will be the one in effect as of the ending date of the 5 year period under review. That rate is the one stated in EFSC rules at OAR Chapter 345, Division 24 under "Means of Compliance". While the "means of compliance" rate may be increased from time to time as authorized in statute, the EFSC CO2 standard (stated in allowed lb. of...

\(^7\) Attachment 2 of IBR's July 2, 2008 letter shows an example of the calculation.
CO2 per kwh) applicable to the KCP will not change but will remain the same throughout
the life of the KCP.

8) At any time, KE will have the option to buy down additional CO2 offset requirement in
any amount relative to the 67,105 pph steam supply break even rate and at the then-
current dollars per ton rate, so long as the original CO2 offset requirement, in tons and
based on the original 200,000 pph steam supply, is satisfied.

B.2 Portfolio Contingency Account

In addition to the steam sales to Collins, the KCP site certificate also required a portfolio
of other carbon dioxide reduction programs, as described above and described in greater detail at
section IV.B of the site certificate. There is no true up for these “other” programs. However,
KE is required to monitor their performance. If they fail to perform as expected, condition
IV.B.6 of the site certificate establishes a $300,000 (in 1996 dollars) contingency fund, to be
used towards additional carbon dioxide offsets if necessary.

In its July 2 letter, IBR acknowledges that none of these “other” offset programs
performed as expected, and there is no chance of their improving. IBR proposes to make the
entire fund available to the Oregon Climate Trust right away (i.e., within 30 days of issuance of
this Order by the Council). IBR requests that, in consideration for early delivery of the
contingency account, site certificate condition IV.B.6 be viewed as fully satisfied or at a
minimum moot, any potential enforcement of this condition be waived, and KE be held harmless
with respect to the requirements of condition IV.B.6 The Council concurs.

B.3 Portfolio Monitoring

Conditions IV.B.8, 9, 10 and 11 of the site certificate require KE to make available
$50,000 annually for the monitoring and verification programs for the offset portfolio, provide
an annual report to EFSC on the performance of the portfolio, and consult with EFSC on an
ongoing basis regarding portfolio performance.

As noted, the portfolio performance has been only a small fraction of original projections,
and this level of performance is not expected to improve. Also as noted, there is no “true up”
condition for these items in the portfolio. KE can meet its obligations by delivering the
contingency fund described above in section B.2 of this Order. Therefore, continued monitoring
and reporting serve no purpose and provide no useful information. Therefore, IBR requests, and
the Department recommends, that conditions IV.B.8, 9, 10 and 11 be considered fully satisfied
and moot, any potential future enforcement of these conditions be waived, and KE be held
harmless with respect to the requirements of these conditions. The requirement to report steam
sales to Collins remains as described in section B.1 of this Order, but the findings set forth in this
section B.3 of this Order apply to offset programs other than steam sales to Collins. The Council
concurs.
C. ORDER

Based on the above facts and discussion, the Energy Facility Siting Council concurs with the request for clarification made by IBR in its July 2, 2008 letter to the Department, and orders that the descriptions in section B of this order be considered accurate clarifications of conditions IV.B.1, 6, 8, 9 10 and 11 of the site certificate.

\[Signature\]

Robert Shiprack
Chair, Energy Facility Siting Council

Notice of the Right to Appeal
You have the right to appeal this Order pursuant to ORS 183.480 et seq. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.480 et seq. If you do not file a petition for judicial review within the 60-day time period, you lose your right to appeal.
02 of July, 2008

Adam Bless
Oregon Department of Energy
625 Marion St., NE
Sailem, Oregon 97301-3742

Subject: Klamath Cogeneration Project (KCP) – Clarifications Regarding the One-Time Payment Option for the Carbon Dioxide (CO2) Shortfall for Operating Years 6 through 30 and General Clarifications Regarding the Oregon Energy Facility Sting Council’s (EFSC’s) Anticipated Supplemental Order

Dear Mr. Bless,

On behalf of IBERDROLA RENEWABLES, Inc. (IBR), which was formerly known as PPM Energy, Inc., I want to thank you for your November 29, 2007 letter, in which the Oregon Department of Energy (ODE) confirmed the one-time payment of $2,437,923.75 as a means of complying with the KCP’s Site Certificate Condition IV.B.1 for operating years 6 through 30. IBR is committed to making this payment in connection with the upcoming Supplemental Order process.

It is our understanding that EFSC will likely issue a Supplemental Order setting out the requirements for addressing any CO2 emissions offset shortfalls for KCP operating years 6 through 30 and that your letter of November 29, 2007 will serve as a basis for the Supplemental Order. Therefore, we are providing this letter, which is meant to clarify issues associated with addressing potential future CO2 offset shortfall accounting as well as some other, more general, issues. It is our intention that the contents of this letter and its attachments will, along with the contents of your November 29, 2007 letter, be referenced in and appended to EFSC’s anticipated Supplemental Order.

Based on your recent discussions with Jan Prewitt with the Oregon Department of Justice and David Filippi with Stoel Rives LLP, we understand that this matter will be placed on EFSC’s July 25, 2008 meeting agenda. We support EFSC’s consideration of this matter at its upcoming meeting, and we will plan to have a representative in attendance. Once EFSC issues a Supplemental Order and puts to rest the various matters contained in this letter, we will then proceed with the submittal of an application to amend the Site Certificate to address issues related to water rights and retirement costs, per our prior discussions.
A. CO2 Offset Shortfall Clarifications.

As you noted in the 3rd to last paragraph of your November 29, 2007 letter, actual steam sales to the Collins facility will need to be verified at five year intervals with the next 5-year period ending on June 30, 2011. If these average annual steam sales are less than the level used to calculate the one-time payment referenced above and a net CO2 shortfall results, additional CO2 offsets payments will be required.

IBR agrees with the contents of your November 29 letter and is providing the following information, which clarifies our understanding of the periodic (5-year) verification process, in order to avoid any future confusion:

- The focus of each 5-year verification will be the KCP’s average annual steam sales. Any CO2 shortfall for the 5-year period will be calculated, based on the energy delivered to Collins and the associated fuel that is displaced. The method used to calculate any CO2 shortfall will be the same as was used in Table A of PPM’s November 12, 2007 e-mail to you.

- Any future improvement projects, which are implemented by the KCP, can be used to reduce any future shortfalls in CO2 offsets. Shortfall reductions due to future improvement projects will be calculated using the same approach as was used in Table B of PPM’s November 12, 2007 e-mail to you.

- KCP steam sales and future improvement projects are the only parameters that will change for the purposes of the 5-year verifications. Reductions to the CO2 shortfall for years 6 through 30 that are based on the KCP’s original 10 improvement projects and reduced levels of nitrogen oxide (NOx) and fine particulate matter (PM10) emissions will remain fixed. These reductions were calculated in Tables B and C, respectively, of PPM’s November 12, 2007 e-mail to you.

- The annual average steam sales amount to Collins during operating years 1 through 5, which was used as a basis to calculate the gross CO2 shortfall for years 6 through 30, was approximately 67,105 pounds per hour (pph), not 70,000 pph. This 67,105 pph figure is based on actual steam data for the period 7/1/01 through 6/30/06. (Refer to Attachment 1.) This annual average steam sales level of 67,105 pph will be the break-even point used for the 5-year verifications.

If annual average steam sales to Collins during the 5-year period under review are equal to or greater than 67,105 pph, then no CO2 shortfall will exist and no additional CO2 offset payment will be required for that 5-year interval. While KCP will not receive any refunds at any time of funds already paid to meet its CO2 offset obligations, carry-forward steam sales and/or (future) improvement project credits will be allowed for each 5-year verification period. Should steam sales in a 5-year interval be greater than 67,105 pph, each ton of associated surplus CO2 offsets will be used as a credit against any future CO2 shortfalls. Any reductions in CO2 shortfall that result from future KCP improvement projects will be calculated as prorated credits in the 5-year period in which these projects were implemented (i.e., based on the start date of the project within the 5-year cycle) and as full credits against any future CO2 shortfalls in all 5-year periods that are subsequent to the one in which the improvements were implemented. In addition improvement project credits not applied in a given 5-year period will be carried forward. (Refer to Attachment 2 for an example.)
• If annual average steam sales to Collins during the 5-year period under review are less than 67,105 pph and there is a net CO2 shortfall for this 5-year period after applying: a) the effect of reductions (in the 5-year period under review) from improvement projects implemented in previous 5-year periods, b) any carry-forward credits from steam sales above 67,105 pph in any previous 5-year periods, c) any carry-forward credits from improvement projects implemented in any previous 5-year periods, but not required to offset CO2 shortfall in those previous 5-year periods, and d) pro-rated reductions from improvement projects implemented in the 5-year period under review, then KCP will owe a payment for the 5-year period under review, based on the net CO2 shortfall in tons for that period.

• If a payment is due for a given 5-year period, the applicable payment rate in dollars per ton of CO2 will be the one in effect as of the ending date of the 5-year period under review. (Refer to Attachment 2 for an example.) Applicable Oregon statutes and EFSC regulations provide for a bi-annual increase of up to 50% in the dollars per ton payment rate, which is also known as the “means of compliance.” While the “means of compliance” can change throughout KCP’s operating years 6 through 30, the EFSC standard used to determine the amount of CO2 requiring offsetting for the KCP (e.g., based on the most efficient combined cycle combustion turbine configuration) will not change, but will remain the same throughout the entire operating life of the KCP.

At any time during its remaining life, the KCP will have the option to buy down additional CO2 offset requirement in any amounts (relative to the 67,105 pph steam supply threshold and at the then-current dollars per ton cost), so long as the original CO2 offset requirement (in tons and based on the 200,000 pph steam supply) is satisfied.

B. Portfolio Contingency Account.

Condition IV.B.8 of the Third Amended Site Certificate requires that a contingency account in the amount of $300,000 (1996 dollars) be maintained by KCP and that this account be drawn upon at the end of operating years 10, 20 and 30, if portfolio performance, as measured at each 10-year interval, is less than 90% of that originally anticipated. The performance of the offset portfolio through 2007 has been considerably less than expected, i.e., on the order of 10% of original estimates, and there are no reasons to believe that this performance will improve substantially between now and the end of the tenth operating year.

Because it is virtually certain that all of the funds held in the contingency account will be drawn upon at the end of operating year 10, we propose that these funds be delivered to the Climate Trust now (e.g., within 30 days of issuance of the Supplemental Order), rather than held in escrow for another 3 to 4 years. This approach will allow the Climate Trust to implement additional greenhouse gas mitigation immediately instead of beginning in the next decade and obviate the need for measurement of 10-year interval portfolio performance. Therefore, we request that the Supplemental Order provide clarification that, in consideration for early delivery of the contingency account, Site Certificate Condition IV.B.8 will be viewed as fully satisfied or at a minimum moot, any potential enforcement of this condition will be deemed waived, and the KCP will be held harmless with respect to the requirements of this condition.

C. Portfolio Monitoring.

There is one additional issue, which we believe can and should be addressed in the Supplemental Order. This issue relates to the requirements of Conditions IV.B.8, 9 and 11 of
the Third Amended Site Certificate. These conditions require that the KCP: make available up to $50,000 annually for monitoring and verification programs for the offset portfolio; provide an annual report to EFSC on the performance of the offset portfolio; and consult with EFSC on an ongoing basis regarding portfolio emphasis and performance. Although these conditions are located within the CO2 Emissions Standard section of the Site Certificate, they are in reality reporting conditions, rather than CO2 performance conditions.

As noted above, the performance of the offset portfolio, which has been documented through 2007 in annual reports, has been a small fraction of original projections. This level of performance is expected to remain approximately the same, i.e., not improve significantly, in the future. The performance of the portfolio projects is not under the control of KCP. Other than the CO2 emissions shortfall issue related to Collins steam supply, which is being addressed separately, the KCP has already met all of its financial obligations related to the offset portfolio. Continued annual reporting and consultation regarding the performance of these projects will neither improve their performance nor provide any useful additional information.

In sum, we believe that future compliance with the requirements of Site Certificate Conditions IV.B.8, 9 and 11 will serve no useful purpose. For this reason, and because we are proposing early delivery of the contingency account to the Climate Trust as described above, and because formally amending Conditions IV.B.8, 9 and 11 could necessitate a complete revision of the complex and complicated CO2 emissions standard section of the Site Certificate, we request instead that the Supplemental Order provide clarification that, in consideration for early delivery of the contingency account, Site Certificate Conditions IV.B.8, 9 and 11 will be viewed as fully satisfied or at a minimum moot, any potential enforcement of these conditions will be deemed waived, and the KCP will be held harmless with respect to the requirements of these conditions.

We appreciate your review and consideration of these clarifications, which are being provided to ensure a mutual understanding by ODE and IBR regarding the periodic 5-year evaluation processes that begin in mid-2011 as well as the other more general issues, and we look forward to confirming them with you. As we have discussed, we believe there are advantages to both IBR and ODE in having the matters addressed in this letter confirmed and documented in a Supplemental Order issued by the Council. In the meantime, please contact me, if you have any questions or if I can be of further assistance. We will look forward to the Council's consideration of these issues at its July 25, 2008 meeting.

Yours Sincerely,

[Signature]

Mike Roberts
Director, Thermal Asset Management

cc: J. Prewitt, Oregon Department of Justice
    D. Filippi, Stoel Rives LLP
    T. Hibbeler

enclosures
ATTACHMENT 1
To the July 02, 2008 Letter
From Iberdrola Renewables to ODE

KCP Annual Average Steam Sales
For the Period
July 1, 2001 through June 30, 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Hourly Steam Flow (lbs/hr)$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>23,844</td>
</tr>
<tr>
<td>2002</td>
<td>67,064</td>
</tr>
<tr>
<td>2003</td>
<td>71,159</td>
</tr>
<tr>
<td>2004</td>
<td>71,214</td>
</tr>
<tr>
<td>2005</td>
<td>70,836</td>
</tr>
<tr>
<td>2006$^2$</td>
<td>31,407</td>
</tr>
<tr>
<td>5-Year Average</td>
<td>67,105</td>
</tr>
</tbody>
</table>

Notes:
1. Average hourly steam flows for 2002 through 2005 are taken directly from the annual KCP reports for fuel displaced and CO2 offsets.

2. The average hourly steam flow shown for 2001 is for the period 7/1/01 through 12/31/01. Because no annual report regarding fuel displaced and CO2 offsets was available for 2001, the average steam flow for the last six months of 2001 was calculated.

The following data for steam energy (assumed as gross not net) delivered to Collins was available:

- July (3 days) 41,643 therms (based on 31/3 x 4,030 for 3 days July data)
- August 44,827 therms
- September 39,799 therms
- October 46,785 therms
- November 25,268 therms
- December 58,593 therms

Total 256,915 therms
Dividing the total of 256,915 therms above by 4,416 (the number of total hours in the period 7/1/01 through 12/31/01): 256,915/44,416 = 58.178 MMBtu/hr

No steam enthalpy data was available for 2001. However, based on data for 2002 & 2003, the average enthalpy of the steam delivered to Collins was approximately 1,220 Btu/lb.

Dividing the average hourly energy delivered by the average enthalpy gives the approximate average steam flow: (58.178 MMBtu/hr)/(1,220 Btu/lb) = 47,687 lbs/hr.

This amount was divided by 2 to provide the 2001 time-weighted average steam flow shown as 23,844 lbs/hr in the table above.

3. The average hourly steam flow shown for 2006, which is for the period 1/1/06 through 6/30/06, is 50% of the 62,813 lbs/hr value in the 2006 annual KCP report for fuel displaced and CO2 offsets.
ATTACHMENT 2
To the July 2, 2008 Letter
From Iberdrola Renewables to ODE

Sample Tracking Table for 5-Yr True-up Calculations

In the example table below:

For 7/1/06 through 6/30/11 – KCP delivers less than an annual average of 67,105 pounds per hour (pph) of steam to Collins and this reduced steam flow results in a CO2 shortfall of 5,000 tons for the 5-year period. KCP also implements improvement projects, which reduce this period’s CO2 shortfall by 500 tons on a pro-rated basis. (For all improvement projects in this and all other 5-year periods below, the implementation dates are assumed to occur exactly half way through the 5-year period.) Therefore, KCP makes a payment based on the 4,500 ton shortfall at a rate (in dollars per ton of CO2) in effect as of the ending date of the 5-year period under review.

For 7/1/11 through 6/30/16 – KCP delivers more than an annual average of 67,105 pounds per hour (pph) of steam to Collins and this surplus steam flow results in a CO2 credit of 2,500 tons for the 5-year period. During this 5-year period KCP also implements improvement projects, which reduce this period’s CO2 shortfall by 750 tons on a pro-rated basis. The full effect of the improvement projects implemented in the previous 5-year period further reduces the potential CO2 shortfall by 1,000 tons. However, no additional steam sales or improvement project carry forward credits are available from the previous 5-year period. There is a net surplus of 4,250 tons of CO2 for this 5-year period. No payment is required and the surpluses (2,500 tons from surplus steam sales & 1,750 tons from improvement project reductions) are carried forward into the next 5-year period.

For 7/1/16 through 6/30/21 – KCP delivers less than an annual average of 67,105 pounds per hour (pph) of steam to Collins and this reduced steam flow results in a CO2 shortfall of 6,000 tons for the 5-year period. During this 5-year period KCP also implements improvement projects, which reduce this period’s CO2 shortfall by 600 tons on a pro-rated basis. The full effect of the improvement projects implemented in the previous 5-year periods further reduces the potential CO2 shortfall.
shortfall by \(1,000 + 1,500 = 2,500 \text{ tons}\). There are additional (previously unapplied) steam sales and improvement project carry forward credits, 2,500 tons & 1,750 tons, respectively, available from the previous 5-year periods. The overall result is a net surplus of 1,350 tons of CO2 for this 5-year period. No payment is required and the surplus (0 tons from surplus steam sales & 1,350 tons from improvement project reductions) is carried forward into the next 5-year period.

For 7/1/21 through 6/30/26 – KCP delivers less than an annual average of 67,105 pounds per hour (pph) of steam to Collins and this reduced steam flow results in a CO2 shortfall of 8,000 tons for the 5-year period. During this 5-year period KCP does not implement any improvement projects. Hence, there is no reduction to this period’s CO2 shortfall on a pro-rated basis. The full effect of the improvement projects implemented in the previous 5-year periods further reduces the potential CO2 shortfall by \(1,000 + 1,500 + 1,200 = 3,700 \text{ tons}\). The additional (previously unapplied) improvement project carry forward credit of 1,350 tons is available from the previous 5-year periods. The overall result is a net shortfall of 2,950 tons of CO2 for this 5-year period. Therefore, KCP makes a payment based on the 2,950 ton shortfall at a rate (in dollars per ton of CO2) in effect as of the ending date of the 5-year period under review.

For 7/1/26 through 6/30/31 – KCP delivers less than an annual average of 67,105 pounds per hour (pph) of steam to Collins and this reduced steam flow results in a CO2 shortfall of 7,000 tons for the 5-year period. During this 5-year period KCP also implements improvement projects, which reduce this period’s CO2 shortfall by 200 tons on a pro-rated basis. The full effect of the improvement projects implemented in the previous 5-year periods further reduces the potential CO2 shortfall by \(1,000 + 1,500 + 1,200 + 0 = 3,700 \text{ tons}\). There are no additional (previously unapplied) steam sales or improvement project carry forward credits available from the previous 5-year periods. The overall result is a net shortfall of 3,100 tons of CO2 for this 5-year period. Therefore, KCP makes a payment based on the 3,100 ton shortfall at a rate (in dollars per ton of CO2) in effect as of the ending date of the 5-year period under review.
### Sample Tracking Table
KCP CO2 Offset True-up for the 5-Year Periods Ending June 30, 2031

<table>
<thead>
<tr>
<th>For the 5-Yr Period Ending June 30 of (All Values in tons of CO2)</th>
<th>2011</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current 5-Yr Period Steam Sales Surplus (Deficit)(^1)</td>
<td>(5000)</td>
<td>2500</td>
<td>(6000)</td>
<td>(8000)</td>
<td>(7000)</td>
</tr>
<tr>
<td>Pro-rated CO2 Reductions from Improvement Projects Implemented in the Current 5-Yr Period(^2)</td>
<td>500</td>
<td>750</td>
<td>600</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>Current 5-Yr Period CO2 Reductions from Improvement Projects Implemented in the 5-Yr Period Ending in Mid-2011</td>
<td>NA</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Current 5-Yr Period CO2 Reductions from Improvement Projects Implemented in the 5-Yr Period Ending in Mid-2016</td>
<td>NA</td>
<td>NA</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Current 5-Yr Period CO2 Reductions from Improvement Projects Implemented in the 5-Yr Period Ending in Mid-2021</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>Current 5-Yr Period CO2 Reductions from Improvement Projects Implemented in the 5-Yr Period Ending in Mid-2026</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Surplus Steam Sales Credits Carried Forward from Previous 5-Yr Periods</td>
<td>NA</td>
<td>0</td>
<td>2500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Surplus Improvement Project Credits Carried Forward from Previous 5-Yr Periods</td>
<td>NA</td>
<td>0</td>
<td>1750</td>
<td>1350</td>
<td>0</td>
</tr>
<tr>
<td>Total Surplus (Shortfall) for the 5-Yr Period</td>
<td>(4500)</td>
<td>4250</td>
<td>1350</td>
<td>(2950)</td>
<td>(3100)</td>
</tr>
</tbody>
</table>

Notes:
1. Based on the method used in Table A of PPM's November 12, 2007 e-mail to ODE.
2. Based on the method used in Table B of PPM's November 12, 2007 e-mail to ODE.
BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of Compliance with ) ORDER on PROGRAM to OFFSET
Condition IV.B.1 of the Klamath ) EMISSIONS of CARBON DIOXIDE,
Cogeneration Project Site ) NITROGEN OXIDES and PM-10
Certificate

Summary
The Energy Facility Siting Council ("Council") approves the program to offset CO₂
proposed by PPM Inc. (PPM) in its August 31, 2007 letter from Michael Roberts of PPM to
Adam Bless of the Oregon Department of Energy, as required by condition IV.B.1 of the
Klamath Cogeneration Project (KCP) site certificate, subject to certain conditions. The Council
finds that the KCP complies with the terms of condition IV.B.1.

Background

Condition IV.B.1 of the KCP site certificate states:

“KCP's off-site industrial use shall be at least the steam energy equivalent of 200,000
pounds of steam per hour at 375 psig and 455°F on a five year basis, measured in discrete,
successive five-year periods. "Use" of the steam means that the steam is used to displace another
source of carbon dioxide emissions from fossil fuels that would have otherwise occurred or
continued to occur. At the end of each five year period following commercial operation, KCP
shall determine and report to the Council the hourly average steam volume, pressure and
temperature delivered to off-site industrial use for the applicable five year period. Should the
hourly average steam used by KCP's off-site industrial use be less than the steam energy
equivalent of 200,000 pounds per hour at 375 psig and 455°F, KCP shall develop, present to the
Council for approval, and implement a plan to make available and sell to another steam user the
steam energy equivalent not used by KCP's existing off-site industrial use at the same or similar
cost incentive as provided to KCP's existing off-site industrial use. If within twelve months after
Council approval, KCP has not contracted to make available and sell to another steam user the
steam energy equivalent not used by KCP's existing off-site industrial use, then KCP shall
develop, present to the Council for approval, and implement a program to offset an amount of
CO₂, NOₓ or PM-10, or any combination thereof, equivalent to the monetized incremental
emissions resulting from the existing off-site industrial use of less than the steam energy
equivalent of an average of 200,000 pounds of steam per hour at 375 psig and 455°F. In any
event, KCP shall offset an amount equivalent to the monetized incremental emissions resulting
from the existing off-site industrial use of less than the steam energy equivalent of an average of
200,000 pounds of steam per hour at 375 psig and 455°F, measured on a five year basis, for 30
years. Calculations of monetized emissions shall use the same methodology and monetary
values of emissions employed in the 500 megawatt exemption Final Order."
In its Annual Report to the Council for 2007, KCP disclosed that steam sales to the
industrial steam host have averaged a rate of approximately 70,000 pounds per hour. Therefore,
the above condition requires KCP to develop and present to the Council for approval, a plan to
offset emissions of CO2, NOx or PM-10, sufficient to make up the shortfall. The plan must
cover the expected plant life of 30 years, and is subject to Council approval.

In a letter dated August 31, 2007 from Michael Roberts (PPM) to Adam Bless (Oregon
Department of Energy), PPM, acting as facility manager on behalf of the City of Klamath Falls,
offered the plan required by the above condition. The letter is attached to this Order.

The Council finds that the proposal in PPM’s August 31, 2007 letter is consistent with the terms
of condition IV.B.1. Certain detailed calculations remain, such as:

a. Verification of PPM’s shortfall calculation. ODOE, acting as Council staff, has performed a
preliminary review and recommends that PPM used a reasonable methodology. However, a
more detailed review is necessary to ensure that the final numbers are correct.

b. PPM has taken credit for emissions in DEQ pollutants. ODOE must ask DEQ to verify that
the emissions reported in PPM’s letter are consistent with its reports to DEQ, and that those
reductions in DEQ pollutants are above and beyond the emissions described in the Final
Order on the 1997 500 MW exemption contested case.

c. ODOE and PPM must work out final details of the payments to the Climate Trust.

The Council approves PPM’s proposal in its August 31, 2007 letter, subject to resolution of
items (a), (b) and (c) above, as determined by the Department of Energy.

Issued September 21, 2007

David Ripma
Chair
Energy Facility Siting Council

Attachment: Letter from Michael Roberts, PPM to Adam Bless, ODOE, August 31, 2007
From: Thor Hibbeler [mailto:thorhibbeler@sbcglobal.net]
Sent: Monday, November 12, 2007 2:37 PM
To: 'Adam Bless'
Cc: 'Willard, Bruce'; 'Roberts, Michael'
Subject: KCP CO2 Shortfall - Yrs 6 through 30

Adam,

Thanks for meeting with Bruce and me last Friday (11/9/07) to develop a consensus regarding the KCP's net CO2 shortfall (due to lower than anticipated steam sales to Collins) for operating years 6 through 30.

Using Tables A, B & C, which were e-mailed to you on Nov. 7, as a basis we agreed to leave Table A (gross CO2 shortfall) & Table C (additional NOx & PM10 reductions due to operation below DEQ permit limits) unchanged and copies of these two tables are attached.

Based on a review of Table B (reductions in CO2 due to KCP improvement projects) and its backup documentation, we agreed to revise this table as follows:

* The adjustment factor for Project # 6 (synthetic air filters) has been changed from 100 to 85.2%. This change reflects anticipated actual annual hours of CT operation of 7,460 rather than 6,740 due to 1,300 hours of annual aux. boiler operation in lieu of CT operation.
* The annual MWh/yr savings for Project # 8 (CTC logic) has been changed from 12,264 to 10,444. This reduction, which is 12,264 times 85.2%, adjusts for anticipated actual operation of the CTs. The adjustment factor for this project remains at 80% to account for the anticipated average load level of the CTs.
* The adjustment factor for Project # 9 (air extraction) has been changes from 100 to 85.2%.

A copy of this revised Table B is attached. The effect of these changes is to decrease the Table B reduction from 15,068 tons/yr to 11,773 tons/yr.

A few editorial changes have been made to this table as well. Note # 3 has been revised to better describe the adjustment factor and, while the adjustment factor for Project # 5 remains the same, it is presented as rounded off to the nearest tenth of a percent (14.8%) rather than to the nearest whole percent (15%).
Based on the results on our meeting last Friday, the KCP’s net CO2 shortfall for operating years 6 through 30 is calculated as:

* Gross annual CO2 shortfall (Table A) = 98,251 tons of CO2;
* Annual reductions to the shortfall due to KCP improvement projects (Table B) = 11,773 tons/yr of CO2;
* Annual reductions to the shortfall due to reduced NOx & PM10 emissions = 9,693 tons/yr of CO2 equivalent; and
* Net annual CO2 shortfall = 98,251 - (11,773 + 9,693) = 76,785 tons/yr of CO2.

The cumulative net CO2 shortfall for operating years 6 through 30 is 76,785 tons/yr x 25 yrs = 1,919,625 tons.

Based on an offset cost of $1.27/ton CO2, the total cost of a one-time upfront payment to resolve the KCP’s CO2 shortfall for years 6 through 30 is 1,919,625 tons x $1.27/ton = $2,437,923.75.

Please review the attached tables and confirm your agreement with these results. Your confirmation will allow PPM to proceed with its financial closing for the KCP ownership transfer, using the $2,438MM figure. Once KCP ownership has been transferred (and provided PPM chooses to maintain the KCP as a base load facility), a check for this amount can be issued and the CO2 shortfall issue for years 6 through 30 will be permanently resolved.

Thanks for all of your help with this issue and please call me, if you have any questions.

TH
# Table A

**KCP CO2 Offset Shortfall Due to Lower Than Anticipated Steam Sales to Collins - Operating Years 6 - 30**

Based on Operating Years 1 - 5

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Energy Delivered (MMBtus)</th>
<th>Fuel Delivered (MMBtus)</th>
<th>CO2 Generated (t CO2)</th>
<th>CH4 Generated (t CO2)</th>
<th>N2O Generated (t CO2)</th>
<th>Totals Offset (t CO2)</th>
<th>Req Offset (t CO2)</th>
<th>EFSC Shortfall (t CO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>256,915.00</td>
<td>293,953.00</td>
<td>17,986.84</td>
<td>59.62</td>
<td>81.81</td>
<td>18,128.27</td>
<td>74,406.40</td>
<td>56,278.33</td>
</tr>
<tr>
<td>2002</td>
<td>715,519.60</td>
<td>818,311.30</td>
<td>50,076.80</td>
<td>165.97</td>
<td>227.75</td>
<td>148,813.20</td>
<td>98,342.88</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>761,703.90</td>
<td>871,376.70</td>
<td>53,324.10</td>
<td>176.74</td>
<td>242.52</td>
<td>148,813.20</td>
<td>95,069.85</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>759,519.13</td>
<td>868,604.78</td>
<td>53,154.50</td>
<td>176.17</td>
<td>241.75</td>
<td>148,813.20</td>
<td>95,240.78</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>751,325.10</td>
<td>859,606.70</td>
<td>52,603.90</td>
<td>174.35</td>
<td>239.24</td>
<td>148,813.20</td>
<td>95,795.71</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>338,046.40</td>
<td>387,129.40</td>
<td>23,690.50</td>
<td>78.52</td>
<td>107.74</td>
<td>23,876.76</td>
<td>74,406.40</td>
<td>50,529.84</td>
</tr>
</tbody>
</table>

**Totals**

3,583,029.13 4,088,981.88 250,836.64 831.37 1,140.82 252,808.82 744,065.00 491,257.18

**Annual Gross CO2 Shortfall (tons) = 98,251**

### Notes:

1. Displaced fuel emissions factor is from pp. 38 & 43 of the 500 MW Exemption Order and based on 87.8% gas firing, 12.2% oil firing and carbon factors of 31.9 lbs/MMBtu for gas & 44 lbs/MMBtu for oil. All of which result in a weighted C emissions factor of 33.376 lbs/MMBtu and a weighted CO2 emissions factor of 122.379 lbs/MMBtu. While CO2 emissions offsets data is provided directly from KCP annual reports for 2002 through 2006, the displaced fuel emissions factor is needed to calculate CO2 emissions offsets for the last half of 2001.

2. Data for 2001 is for the last half of the year. July 2001 data is extrapolated based on the last three days of July. Data for the first half of 2006 is 50% of the 2006 total. Collins' fuel displacement, thermal energy delivery and CO2 offset data are available beginning in 2002. For 2001 fuel displacement data is based on gross steam energy delivered to Collins.

3. CH4 emissions factors of 0.008 kg/MMBtu & 100-yr global warming potential of 23 are from the KCP 2007 Annual Report to EFSC.

4. N2O emissions factors of 0.000853 kg/MMBtu & 100-yr global warming potential of 296 are from the KCP 2007 Annual Report to EFSC.
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Improvement Annual Project Savings (MWh/yr)</th>
<th>Adj. Annual Savings of Improvement Project Savings Project Initiation</th>
<th>Years of Operation</th>
<th>Improvement Project During</th>
<th>Project During 25-Yr</th>
<th>Period 25-Yr</th>
<th>CO2 Emissions Saved (MWh/yr)</th>
<th>CO2 Emissions Saved (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Wastewater Pump 100 hp VFD</td>
<td>481</td>
<td>100</td>
<td>481</td>
<td>6/1/2005</td>
<td>25.00</td>
<td>6/1/2005</td>
<td>25.00</td>
<td>12025</td>
</tr>
<tr>
<td>2 - Process Desuperheater 75 hp VFD</td>
<td>290</td>
<td>100</td>
<td>290</td>
<td>6/1/2005</td>
<td>25.00</td>
<td>6/1/2005</td>
<td>25.00</td>
<td>7200</td>
</tr>
<tr>
<td>3 - HRSG Fdwr Pump 2,300 hp VFD</td>
<td>7869</td>
<td>100</td>
<td>7869</td>
<td>7/1/2006</td>
<td>25.00</td>
<td>7/1/2006</td>
<td>25.00</td>
<td>196725</td>
</tr>
<tr>
<td>6 - New Synthetic CTG Air Filters</td>
<td>4561</td>
<td>85.2</td>
<td>3884</td>
<td>5/1/2005</td>
<td>25.00</td>
<td>5/1/2005</td>
<td>25.00</td>
<td>97104</td>
</tr>
<tr>
<td>7 - Flashtank Drain Coolers</td>
<td>84</td>
<td>100</td>
<td>84</td>
<td>5/1/2005</td>
<td>25.00</td>
<td>5/1/2005</td>
<td>25.00</td>
<td>2100</td>
</tr>
<tr>
<td>8 - Improved OTC Logic Control</td>
<td>10444</td>
<td>80</td>
<td>8355</td>
<td>12/1/2004</td>
<td>25.00</td>
<td>12/1/2004</td>
<td>25.00</td>
<td>208880</td>
</tr>
<tr>
<td>9 - Air Extraction Project</td>
<td>980</td>
<td>85.2</td>
<td>835</td>
<td>11/1/2004</td>
<td>25.00</td>
<td>11/1/2004</td>
<td>25.00</td>
<td>20864</td>
</tr>
<tr>
<td>10 - PCR Re-route (Note 4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18473</td>
</tr>
<tr>
<td>Totals</td>
<td>45189</td>
<td>26612</td>
<td></td>
<td>661074</td>
<td>294328</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Annual Reduction in CO2 Emissions (tons) = 11773**

**Notes:**
1. The CO2 emissions factor is from p. 38 of the 500 MW Exemption Order.
2. The Heat Rate is based on the information reported to EFSC per the 100 Hour Heat Rate Test and represents the original Heat Rate of 6,795 BTUs/kWh, as adjusted for 3% degradation and 1.97% instrument uncertainty.
3. The adjustment factors shown assume base load operation for the KCP at 7,460 hours per year (to reflect 1,300 hours per year of aux. boiler operation when the CT's are not in operation) and/or an average CT load level of 50%. In some instances a factor of 100% is used to reflect actual anticipated energy savings.
4. The PCR re-route project improves the Heat Rate of the Aux. Boiler directly, rather than the other improvement projects, which reduce electrical parasitic load. Therefore, there is no MWh savings per se. Instead, the reduction in CO2 emissions is based on 9.8% of the total (post-project) CO2 emissions for the 25-yr period assumed as 5.8 tons CO2/hr @ 100 MMBtu/hr fuel in for 1,300 hpy, as 9.8% represents the improvement in aux boiler efficiency.
<table>
<thead>
<tr>
<th>TABLE C</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCP - Estimated Additional NOx &amp; PM10 Reductions to CO2 Shortfall - Operating Years 6 - 30</td>
</tr>
<tr>
<td>Based on 100% Capacity Factor &amp; KCP Performance for Years 1 - 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A. Historical Basis (1st Five years of KCP Operation)</th>
<th>Adjusted NOx</th>
<th>Actual NOx</th>
<th>Additional NOx</th>
<th>Adjusted PM10</th>
<th>Actual PM10</th>
<th>Additional PM10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity Factor</td>
<td>(tons)</td>
<td>(tons)</td>
<td>(tons)</td>
<td>(tons)</td>
<td>(tons)</td>
<td>(tons)</td>
</tr>
<tr>
<td>2001</td>
<td>0.753</td>
<td>135.5</td>
<td>102.03</td>
<td>94.92</td>
<td>7.11</td>
<td>22.69</td>
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<tr>
<td>2002</td>
<td>0.522</td>
<td>271</td>
<td>141.46</td>
<td>131.6</td>
<td>9.86</td>
<td>60</td>
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<tr>
<td>2003</td>
<td>0.583</td>
<td>271</td>
<td>157.99</td>
<td>129.3</td>
<td>28.69</td>
<td>60</td>
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<tr>
<td>2004</td>
<td>0.522</td>
<td>271</td>
<td>141.46</td>
<td>116.5</td>
<td>24.98</td>
<td>60</td>
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<tr>
<td>2005</td>
<td>0.499</td>
<td>271</td>
<td>135.23</td>
<td>118.5</td>
<td>16.73</td>
<td>60</td>
</tr>
<tr>
<td>2006</td>
<td>0.341</td>
<td>135.5</td>
<td>46.21</td>
<td>46.65</td>
<td>NA</td>
<td>30</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>87.39</strong></td>
<td></td>
<td><strong>40.37</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Historical Basis with Additional NOx &amp; PM10 Reductions Adjusted for 100% Capacity Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted NOx</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Capacity Factor</td>
</tr>
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<td>2004</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2006</td>
</tr>
<tr>
<td><strong>5-Yr Totals (tons)</strong></td>
</tr>
</tbody>
</table>

Average Annual Projected Reductions (tons) NOx = 31.78 PM10 = 16.68

Combined Annual NOx & PM10 Projected Reductions (tons) = 48.46

Equivalent Annual CO2 Reduction (tons) Based on a 200:1 Ratio = 9693

Notes:
1. Annual emissions are from the KCP's report for 2007 except that 2004 NOx was revised from 113.4 to 116.5 tons per the DEQ.
2. The Plant Site Emissions Limits (PSEILs) for 2001 & 2002 have been adjusted to 50% of the annual PSEILs.
3. Emissions for 2001 were not available, so the 2002 emissions were raised by 753.522 and divided by 2 to estimate reasonably high 2001 emissions (for the last half of 2001).
4. Emissions for 2006 are shown as 50% of actual to reflect operations for 1/1 through 6/30/06.