Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 20, 2012

TO: Persons on the attached mailing list.

RE: Lower Colorado River Authority
Permit Nos. 51770 and PSD-TX-486M3

Decision of the Executive Director.

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter is a copy of the Executive Director's Response to Comments. A copy of the complete application, draft permit and related documents, including public comments, is available for review at the TCEQ Central office. A copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the TCEQ central office located at 12100 Park 35 Circle, Building E, Room 103, Austin, Texas, at the TCEQ Austin Regional Office located at 12100 Park 35 Circle, Building A, Room 179, Austin, Texas, and at and the Fayette Public Library, 855 South Jefferson Street, La Grange, Fayette County, Texas. The facility's compliance file, if any exists, is available for public review at the TCEQ Austin Regional Office at the address listed above.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. A brief description of the procedures for these two requests follows.

How To Request a Contested Case Hearing.

It is important that your request include all the information that supports your right to a contested case hearing. You must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

(1) Your name, address, daytime telephone number, and, if possible, a fax number.

(2) If the request is made by a group or association, the request must identify:

(A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group; and

(B) one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization's purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.

(3) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.

(4) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: "I request a contested case hearing."

Your request must demonstrate that you are an **"affected person."** An affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities. A person who may be affected by emissions of air contaminants from the facility is entitled to request a contested case hearing.

Your request must raise disputed issues of fact that are relevant and material to the commission's decision on this application. The request must be based on issues that were raised during the comment period. The request cannot be based solely on issues raised in comments that have been withdrawn. The enclosed Response to Comments will allow you to determine the issues that were raised during the comment period and whether all comments raising an issue have been withdrawn. The public comments filed for this application are available for review and copying at the Chief Clerk's office at the address below.

To facilitate the commission's determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director's responses to comments that you dispute; and 2) the factual basis of the dispute. In addition, you should list, to the extent possible, any disputed issues of law or policy.

How To Request Reconsideration of the Executive Director's Decision.

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director's decision. A request for reconsideration should contain your name, address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director's decision, and must explain why you believe the decision should be reconsidered.

Deadline for Submitting Requests.

A request for a contested case hearing or reconsideration of the executive director's decision must be **received by** the Chief Clerk's office no later than **30 calendar days** after the date of this letter. You may submit your request electronically at http://www.tceq.texas.gov/about/comments.html or by mail to the following address:

Bridget C. Bohac, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Processing of Requests.

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the alternative dispute resolution director and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

How to Obtain Additional Information.

If you have any questions or need additional information about the procedures described in this letter, please call the Public Participation and Education Program, toll free, at 1-800-687-4040.

Sincerely,

Bridget C. Bohac

Bridget C. Bohac
Chief Clerk

BCB/ms

Enclosure

MAILING LIST
for
Lower Colorado River Authority
Permit Nos. 51770 and PSD-TX-486M3

FOR THE APPLICANT:

Andrew Valencia
Manager of Power and Gas Operations
Lower Colorado River Authority
104 East State Highway 71 Bypass
La Grange, Texas 78945-4445

Joe Bentley, Environmental Advisor
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P.O. Box 220
Austin, Texas 78767-0220

INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR
via electronic mail:

Brian Christian, Director
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Janis Boyd Hudson, Staff Attorney
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FOR PUBLIC INTEREST COUNSEL
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FOR THE CHIEF CLERK
via electronic mail:

Bridget C. Bohac, Chief Clerk
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PO BOX 50
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TCEQ AIR QUALITY PERMIT NUMBERS 51770 AND PSD-TX-486M3

APPLICATION BY	§	**BEFORE THE**
LOWER COLORADO	§	
RIVER AUTHORITY	§	**TEXAS COMMISSION ON**
FAYETTE POWER PROJECT	§	
LAGRANGE, FAYETTE COUNTY	§	**ENVIRONMENTAL QUALITY**

2012 SEP 20 AM 9: 24
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the New Source Review (NSR) Authorization application and Executive Director's preliminary decision.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk timely received comments from the following: Raul P. Bustillo, Jeffrey Cook, Jeffrey Crunk, Environmental Integrity Project (EIP), Environmental Protection Agency – Region 6 (EPA), Greenpeace USA (Greenpeace), Harvey Hayek, Shane Johnson, Virginia Leech, John W. Mikus, Susan Pantell, Darelle E. Robbins, Sierra Club, Allison Sliva, Texas Campaign for the Environment (TCE), Valerie Thatcher, and David Westbrook. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.texas.gov.

BACKGROUND

General Description of the Application and Description of Facilities Authorized

The Lower Colorado River Authority (LCRA) applied to the TCEQ for amendments to NSR permits under Texas Clean Air Act (TCAA), § 382.0518, for facilities at its Fayette Power Project (FPP). FPP is located 7 miles east of LaGrange on Highway 71, Fayette County. The application requests amendment of both Permit No. 51770 and Permit No. PSD-TX-486M3, and the purpose of the application is to convert the existing authorization for the facilities at FPP, under Permit 51770, from a permit issued under 30 TAC Chapter 116, Subchapter G to an air quality permit issued under 30 TAC Chapter 116, Subchapter B. The permit document for FPP will include both the de-flexed minor NSR permit and Prevention of Significant Deterioration (PSD) Permit PSD-TX-486M3. FPP is also subject to Plant-Wide Applicability Limit (PAL) Permit PAL2.

LCRA did not request authorization of any new construction or air contaminants, or any increases in emissions. This permit amendment, if issued, will not authorize new construction or any changes to existing equipment, nor authorize an increase in emission limits. This amendment will establish individual unit emission limits that are less than or equal to the caps that are in the flexible permit. For any pollutants for which the sum of the proposed individual unit emission limits exceeds the flexible permit emission caps, compliance caps are being

established that are less than or equal to the current flexible permit caps to ensure that the permit action does not result in an increase in allowable emissions.

FPP consists of three pulverized coal steam electric generating units currently fired with low sulfur sub-bituminous coal. The gross generating capacity of Units 1, 2, and 3 is approximately 650 megawatts (MW), 640 MW, and 470 MW respectively. All three utility boilers are equipped with low NO_x burners and over fired air systems to minimize emissions of oxides of nitrogen (NOx). Flue gas from each of the utility boilers is routed through an electrostatic precipitator (ESP) for particulate control. Flue gas from each of the three utility boilers is also routed through a wet scrubber that removes sulfur dioxide (SO2) and other acid gases, before the flue gas is exhausted through a stack to the atmosphere. Fly ash removed by the ESP is collected in hoppers and pneumatically conveyed to storage silos prior to loading for disposal or sales. FPP also consists of ancillary coal, limestone, and ash material handling facilities that are controlled by baghouses, foam suppression, sprays, and enclosures. Contaminants authorized under this permit include NOx, SO2, carbon monoxide (CO), particulate matter (PM) including particulate matter with diameters of 10 microns or less (PM10) and 2.5 microns or less (PM2.5), sulfuric acid (H2SO4), and lead (Pb).

Procedural Background

The application was received on January 31, 2011, and declared administratively complete on April 15, 2011. Although compliance with TCEQ's public notice requirements in 30 TAC Chapter 39 is not required for this application, LCRA voluntarily elected to publish notice and post signs to notify the public of this application. The Notice of Receipt and Intent to Obtain an Air Quality Permit for this amendment application was published in the *Fayette County Record* on April 22, 2011. The Notice of Application and Preliminary Decision for an Air Quality Permit for this application was published in the *Fayette County Record* on May 15, 2012. These notices provided the opportunity to submit comment and to request a contested case hearing and a public meeting. State Representative Eddie Rodriguez and some commenters requested a public meeting, which was held in LaGrange on June 14, 2012.

COMMENTS AND RESPONSES

COMMENT 1: Some commenters are opposed to the issuance of the permit (Greenpeace, Mr. Mikus, Ms. Sliva, Ms. Thatcher). Mr. Crunk is opposed to the continuance of the plant, stating that the thirty-year-old plant should be retired as soon as is practically possible. Mr. Crunk further commented that there is widespread grassroots opposition to continued reliance on coal. He also commented that now is the time for TCEQ, ERCOT and LCRA to seriously consider whether spending hundreds of millions of dollars on two thirty-year old coal plant generators is a sound investment. Greenpeace's representative, an Austin Energy customer, commented that there is a movement in Austin to get Austin Energy out of the plant by 2016, and therefore LCRA should consider retiring its plant soon. Mr. Mikus commented that the money that will be spent on the FPP plant would be better spent on retraining LCRA employees to be the alternative energy producers of the future and converting the FPP to a gas-fired plant, and that the external costs of coal far exceed any internal benefit of coal. He wants coal use ended. He also asked

about wind energy and its cost competitiveness with coal, and stated that natural gas is a viable alternative. Specifically, he stated that Texas needs to stop sending $2 billion to out of state coal companies annually and instead spend that money on clean energy alternatives which will result in energy independence, job creation and make the country more competitive, as well as result in a cleaner environment. Ms. Thatcher commented that dirty coal plants just pass along the so-called energy cost savings onto citizens in the form of higher expenses for health, the cost of food (particularly for pecans near Fayette), and degradation in quality of life, so LCRA should not balk at the expense of modifying this plant to adhere to the EPA's latest standards for emissions. Ms. Sliva requested TCEQ and LCRA refuse to continue permitting and operating FPP, stating that the rules and processes fail to protect the public.

RESPONSE 1: These comments are primarily directed to LCRA's business decisions to operate FPP rather than to TCEQ regarding the content of LCRA's de-flex amendment application and the executive director's review of that application. The executive director does not participate in decisions regarding what types of facilities are proposed to be built, what fuel sources are selected, nor in decisions regarding continued operation of permitted facilities. Rather, the executive director determines whether permit applications are legally and technically sufficient for issuance of a permit to construct and operate facilities that emit air contaminants, and ensure compliance with that permit and applicable statutes and rules.

COMMENT 2: Mr. Cook and Greenpeace commented about the notice given to the public regarding the application's submission. Greenpeace also specifically commented about notice related to public meetings, stating that it is woefully inadequate, and that almost nobody ever knows about these permits, unless persons like him help raise awareness in the community. Greenpeace finds it ironic that TCEQ's Office of Public Interest Counsel exists, since that is the role the TCEQ should have. Greenpeace further commented that the TCEQ is not doing enough to let the public know that these things are going on. Mr. Cook would like there to be some publication of the process, including providing opportunities for public involvement and the public's input on the permit application so that 10-20 years from now we could tell them there were opportunities to be informed, and that way it would be fair for both the State agencies and the general public. Mr. Cook also wants to know if the LCRA has ever considered board meetings up and down the Basin, instead of just in Austin.

RESPONSE 2: Notice of the public meeting was published in the *Fayette County Record* on May 15, 2012 as part of the Notice of Preliminary Decision, and on the Public Meetings section of the TCEQ's web page. In addition, this notice was mailed to those persons on the mailing list(s) for, or concerning, the particular application. The executive director cannot respond to comments about the location of LCRA's board meetings.

COMMENT 3: Several commenters commented about the legal sufficiency of the application (Mr. Crunk, EIP, Greenpeace, Mr. Johnson, EIP). Mr. Crunk stated that the FPP is not currently in compliance with the law in its emissions, stating that the draft permit contains errors and

omissions. Mr. Crunk commented that the draft permit doesn't meet best available control technology (BACT) and doesn't contain emission limits for mercury. He further commented that the plant is decades late in meeting its statutory obligations under federal Clean Air Act (FCAA). Mr. Johnson asked how the TCEQ and the LCRA have accommodated all the applicable federal requirements for the plant into the current application. Specifically, he commented that he did not believe that the submitted application contained sufficient pollution control standards as required by federal law, commenting that both BACT standards and MACT standards for coal-fired power plants were absent from the application. EIP and Mr. Crunk commented that the permit should be revised to reduce the emission of air toxics, and Mr. Crunk further commented that the draft permit contains no limits for heavy metal air toxics, such as mercury, which contravenes new federal rules requiring compliance with the MACT for toxics. Mr. Johnson commented that Attachment A to the permit's special conditions is the only place in which limits for toxic metals are included, but that Attachment is unenforceable by citizens and therefore has no effect. Greenpeace commented that the flexible permit program has always been illegal, and this permit is the fault of TCEQ and LCRA. EIP also commented that the application and draft permit do not demonstrate how the proposed emission limits meet BACT.

RESPONSE 3: The executive director does not agree that LCRA is operating without a valid PSD permit. Additionally, as noted in the technical summary, BACT and impacts reviews were not triggered by the de-flex amendment. This permit amendment application was submitted to convert the existing flexible permit issued under TCEQ rules in Chapter 116, Subchapter G to a Chapter 116, Subchapter B permit. The permit amendment does not authorize any new facilities, nor does the amendment authorize any modification to existing facilities. The permit amendment does not authorize an increase in allowable emission rates for any existing or new air contaminants; therefore, a BACT review is not required. The facilities currently authorized by the flexible permit were previously permitted prior to authorization of those sources by a flexible permit issued on October 10, 2002, and were subject to BACT reviews at the time they were originally permitted and when the flexible permit was issued in 2002. Reevaluation of previous BACT determinations was not triggered by this amendment to convert the flexible permit to a Subchapter B permit.

In addition to mercury emissions, other trace metals were not speciated. This is because these emissions are limited by the particulate emissions limits in the permit. There was no cap for mercury or metals in the flexible permit, and therefore the de-flex action did not apply to these trace metals. Further, mercury emissions are subject to the MATS rule. And, all applicants, regardless of their permit conditions, are subject to compliance with MACT standards. Appendix A is part of the permit and is enforceable.

COMMENT 4: EPA asked whether LCRA submitted an update to the permit application containing the information that the EPA requested after the date of its May 20, 2011, letter, and requested TCEQ forward that information to EPA if it was submitted. Mr. Johnson asked how the application been modified since the EPA's May 20th, 2011 letter.

RESPONSE 4: LCRA submitted additional information on April 2, 2012 related to material handling sources and emissions; however, LCRA did not submit additional information addressing questions raised in EPA's letter to the TCEQ dated May 20, 2011. The executive director did not ask LCRA for additional information because the application already contained some of the information sought by EPA and some of the information sought by EPA was not necessary to establish unit specific emission rates and to de-flex the permit.

COMMENT 5: EPA asked whether any of the emission units regulated under proposed permit 51770 are also regulated by any other Title 30 TAC Chapter 116 permit. EPA also asked if any emission unit is regulated through another NSR permit, how those requirements affect the emission limits in this permit.

RESPONSE 5: Emission units authorized under Permit No. 51770 are also authorized by PSD permit (PSD-TX-486M3), PAL permit (PAL2), and standard permits listed in SC No. 24. The emission limits authorized by the standard permits have been incorporated into Permit No. 51770. Emission limits included in the PSD permit will be consistent with the emission limits established in a de-flexed Permit No. 51770 because a combined permit document will be issued. Emission limits in the PAL permit are not affected by the emission limits in Permit 51770. The PAL permit is scheduled for renewal in 2012 and emission limits in that permit will be subject to evaluation consistent with state and federal rules. In cases where multiple permit authorizations exist for emission units, permit holders are required to comply with all authorizations, including the most stringent requirements.

COMMENT 6: Sierra Club and TCE commented that FPP is a major source of air pollution currently operating without a valid PSD permit and thus should be brought into compliance with the FCAA Section 165 immediately, by requiring LCRA to show compliance with present-day BACT and the National Ambient Air Quality Standards (NAAQS). Mr. Crunk commented that FPP is decades late in meeting its statutory obligations under federal law.

RESPONSE 6: The executive director does not agree that LCRA is operating without a valid PSD permit. Additionally, as noted in the technical summary, BACT and impacts reviews were not triggered by the de-flex amendment. This permit amendment application was submitted to convert the existing flexible permit issued under Subchapter G to a Subchapter B permit. The permit amendment does not authorize any new facilities, nor does the amendment authorize any modification to existing facilities. The permit amendment does not authorize an increase in allowable emission rates for any existing or new air contaminants; therefore, a BACT review is not required. The facilities currently authorized by the flexible permit were previously permitted prior to reauthorization of those sources in the flexible permit issued on October 10, 2002, and were subject to BACT reviews at the time they were originally permitted and when the flexible permit was issued in 2002. Reevaluation of previous BACT

determinations was not triggered by this amendment to convert the flexible permit to a Subchapter B permit. As a result of this amendment action, actual emissions will not change.

COMMENT 7: Sierra Club and TCE commented that the plant has undergone major modifications without meeting BACT or conducting required impacts analyses. Specifically, the draft permit does not satisfy BACT. Commenter stated that BACT limits should be established for boilers in lb/MMBTu limits for any given pollutants to avoid exceedances of the NAAQS. Sierra Club and TCE commented that during the time the plant operated under a flexible permit, LCRA has virtually rebuilt the entire boilers, replacing all boiler tubes and major boiler components to avoid future outages and extend the life of the power plant. Sierra Club and TCE provided documents supporting their comments that LCRA has clearly undertaken major upgrades and modifications. These modifications to the boilers were "major" modifications that would have triggered major NSR, which did not occur. Sierra Club and TCE also commented that Unit 3 has always had a federal PSD condition limiting the sulfur content of fuel to no more than 2.75 percent sulfur (dry weight basis). This limit should be included in the permit, and TCEQ should consider additional fuel limitations (e.g., ash content) consistent with the definition of BACT.

RESPONSE 7: The executive director does not share the commenter's opinion that changes to the boilers at FPP over the duration of the flexible permit were "major modifications." The term "major modification" is defined in federal rule and describes specific actions and considerations that must be evaluated before concluding that major NSR permitting is triggered. Items typically considered in determining whether a change was a "major modification" include the nature of the changes to the boilers, the resulting actual change in emissions resulting from those changes, the actual emissions following changes compared to the plant-wide applicability limits, and contemporaneous changes in emissions. The comment ignores the fact that the FPP plant site is subject to a PAL permit. The PAL permit allows for physical changes at the site provided actual emissions remain below the site-wide PAL emission levels. The commenter did not provide evidence that actual emissions have exceeded the limits in the PAL permit to substantiate the claims that a "major modification" has occurred. LCRA maintains documentation of all actual emissions at the plant in order to comply with the site-wide PAL. Over the duration of the flexible permit, the TCEQ Regional Office has not noted any circumstances where actual emissions have exceed the PAL as the result of a new emission source being added to the site or as a result of a physical or operational change to an existing source at the site. Therefore, the executive director has concluded a "major modification" has not been triggered. A BACT review is one component of an NSR permit review. Since a major modification was not triggered, and NSR permitting was not triggered, there was also no requirement to conduct a BACT review.

Finally, the draft permit does not include the specific condition regarding a fuel sulfur limit referenced in the comment. However, the draft de-flex permit carries forward from the flexible permit the requirements for scrubbing SO_2, lower

maximum SO_2 emission rates (as contained in the MAERT), and the use of SO2 CEMS, which are more stringent methods for control of sulfur emissions and demonstrating compliance with those methods than a fuel sulfur limitation. The ash content limitation remains in the permit in SC4, and the draft de-flex permit contains other fuel limitations in SC4 and Attachment A. No BACT update is necessary regarding fuel use; see also Response 16 regarding fuel usage.

COMMENT 8: EPA commented that the application submitted to TCEQ on January 31, 2011 does not meet all of the EPA-recommended processes for transitioning a Subchapter G, flexible permit into a permit issued under Subchapter B. EPA specifies that all historical permit transactions should be evaluated, further commenting that the application does not justify the requested assigned emissions limitations. Specifically, Tables 7-1, 7-2, and Sections 8 and 9 of the application are inadequate in that they must contain information demonstrating whether the emission limits requested by LCRA are the appropriate limits based upon an analysis of historical permit authorizations which would include determining whether past authorizations should have undergone NSR review. EPA also suggested that a historical review and summary organized chronologically listing the physical or operational changes that required case-by-case NSR, permit by rule, standard permit authorization, qualified facility changes, and any other changes authorized under the flexible permit that did not require individual NSR authorization would be helpful.

Sierra Club and TCE commented that TCEQ should conduct a thorough examination of the FPP permitting and operational history, from the last SIP-approved permit to the new proposed permit, to ensure that LCRA has not circumvented the FCAA or the TCAA, or triggered NSR without meeting BACT. Mr. Johnson commented about EPA's comments on the application, asking whether the permit application complies with EPA's request for a thorough examination of the facility's permitting and operational history, and where in the application that might be located.

Mr. Johnson asked how the draft permit corresponds to the EPA's recommended transition process for flexible permits. Mr. Crunk also commented that the application is not consistent with EPA's recommendations for correcting the plant's non-compliance under the illegal Flex Permits regime.

RESPONSE 8: LCRA's application was filed as an amendment application, which is a process that is approved as a part of the Texas State Implementation Plan (SIP), rather than a process developed by EPA that is not part of the SIP.

The executive director evaluates the applicability of major NSR (PSD and nonattainment permitting requirements) at the time minor NSR permit actions are submitted to the agency. That evaluation has consistently been followed for LCRA and other companies over the duration of the flexible permit program. The executive director is unaware of any new projects following the issuance of LCRA's flexible permit and PAL that would have triggered major NSR at FPP. Section 7, Comparison with Legacy Permits, and Appendix B, Emission Calculations describe the basis for individual emission limitations.

Additionally, the executive director evaluates compliance with both major and minor NSR requirements through the enforcement of the PAL and other existing NSR authorizations at the plant site. LCRA maintains documentation of all actual emissions, regardless of their NSR authorization (major, minor, PBR, standard permit, qualified facility change) at the site in order to comply with the site-wide PAL. Over the duration of the flexible permit, the TCEQ Regional Office has not noted any circumstances where actual emissions have exceed the PAL as the result of a new emission source being added to the site or as a result of a physical or operational change to an existing source at the site. The emission limits proposed by LCRA in the de-flex amendment are appropriate.

COMMENT 9: EPA commented that there does not appear to an analysis of how LCRA derived its proposed individual emissions limitation for each emission unit that was covered under the flexible permit, and asked how the individual hourly emission rates developed comport with the definition of Potential to Emit found in TCEQ's Potential to Emit guidance (citing to http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/pte.pdf).

Sierra Club and TCE commented that the application contains no explanation of the BACT limits, which should be justified, and that the application should contain separate limits for all regulated pollutants, and specify the monitoring methods.

RESPONSE 9: Section 5, Emission Rate Basis, of LCRA's application describes how LCRA derived the proposed individual emission limitations. Additionally, Section 7, Comparison with Legacy Permits, and Appendix B, Emission Calculations, also describe the basis for individual emission limitations. The guidance document referenced by EPA is not relevant to this de-flex permit amendment, since LCRA is a major source and has always been a major source. In the first section of the guidance document there is a sentence that says, "[p]lease note that PTE is a theoretical calculation (which may differ from actual emissions) used to determine if a site is a major source." As EPA is aware, both the major NSR and federal operating permit programs are based upon tons per year emitted and not on the hourly emission rates. With regard to monitoring requirements, see Responses 10 and 27.

COMMENT 10: EPA requested TCEQ ensure that the permit defines each individual emission point for each applicable monitoring, recordkeeping, and reporting requirement to demonstrate compliance with individual emission limits.

RESPONSE 10: The draft permit establishes emission limitations for each source authorized by the permit. It also requires continuous emissions monitors (CEMS) where appropriate as well as records of process parameters to be maintained to demonstrate compliance with emission limitations for units not equipped with CEMS.

COMMENT 11: Generally, commenters wanted to know the methodology supporting their

understanding that some emissions limitations are higher than what have been permitted in the past. Mr. Crunk commented that the draft permit should contain lower emission limits than used in the past and that coal plants should be held to the highest permissible air quality standards. Sierra Club and TCE commented that no explanation was provided in either the application or the draft permit for the PM limits, and neither set the emission limits at least as stringent as prior permits, asserting that the LCRA misrepresented the emissions at its plant. They commented more specifically about PM emissions, stating that the PM cap is not based on actual emissions in violation of federal law. Specifically, Mr. Mikus commented that the permit may actually increase the emission of "ultrafines," or of mercury. Mr. Johnson asked if emission levels in the old flex permit were illegal, why the new draft permit doesn't reflect lower allowable emission limits. In addition, he asked why limits for CO and HCI increased and whether these increases reflect improving permit standards. He also commented about the differentiation between interim and final limits from a previously issued permit, asking why this "outdated division" of the limits was included in this new permit application. Mr. Westbrook wants to know what limits are going up.

RESPONSE 11: The draft permit contains unit specific emission limits that are less than or equal to emission limits contained in the legacy permits that predated the issuance of the flexible permit, with the exception of CO emissions from the three utility boilers and lead emissions from utility boilers one and two. Tables 7-1 and 7-2 in the de-flex application correctly compare legacy permit limits to the final de-flex permit limits. The reason for the difference in CO emission limits between the legacy permits and the de-flex draft permit were originally explained and documented almost ten years ago when the original flexible permit was issued on October 10, 2002. CO emissions increased under a pollution control standard permit, also issued in October 2002, that authorized the installation of low NO_x burners and over-fired air systems to achieve NO_x reductions required by state rules. The original flexible permit incorporated both the NO_x decreases and the collateral CO increases associated with the pollution control standard permit into the flexible permit emission caps. The de-flex draft permit authorizes unit specific CO emission limits reflecting the controls authorized by the standard permit and incorporated into the flexible permit caps. A compliance cap for CO emissions will be retained to ensure emissions did not exceed previously authorized emission limits. The difference between the legacy permits and the de-flex permit unit specific lead emission limits is 0.04 tons per year per boiler and is not significant. The comment about a PM cap being a violation of federal law unless the cap was based upon actual emissions is not relevant to the de-flex amendment because a PM cap was not included in the de-flex draft permit.

COMMENT 12: Sierra Club and TCE commented that Certain Proposed emission limits result in significantly higher allowable emissions than those limits contained in prior SIP-approved ("Legacy") permits and the flexible permit. Annual and hourly proposed CO, VOC, lead, NOx, and PM limits are higher than previously authorized limits. In addition, some hourly or annual limits sum to higher than previously authorized Flex Permit caps. Also, certain pollutants are authorized, or proposed to be authorized, at levels higher than what LCRA has reported on past Emission Inventories. If the Draft Permit will authorize emissions at levels higher than

previously emitted or authorized, this is yet one more reason to conduct a full impacts analysis and BACT review.

RESPONSE 12: Response 11 identifies CO and lead as the only two air contaminants with higher emission rates than the legacy permits and the response explains why the emission limits are higher. The commenter points out that some of the emission rates in the de-flex permit sum to higher emission rate limits than the flexible permit caps, yet the commenter fails to acknowledge that the draft permit retained compliance caps to insure the summation of unit specific emission limits authorized in the de-flex permit would not exceed the flexible permit emission caps. The commenter points out that some emissions will be authorized at levels higher than emission levels reported in past emission inventories. Emission inventories are based upon past actual emissions; whereas the unit specific permit allowable emission rates are based upon BACT. In this de-flex permit amendment, unit specific permit allowable emission rates were established primarily upon BACT at the time the flexible permit was issued and not upon past actual emissions. The TCEQ expects companies to comply with permit limitations, including permit maximum allowable emission rates; therefore, past actual emission reported to the emission inventory should be less than their permit allowable emission for compliant emission sources. The commenter's conclusion that a full impacts review and a BACT review should be conducted is not based upon the regulatory basis for requiring either review. Responses 3, 6, 7, 29 and 30 explain why BACT review and impact reviews were not triggered with this de-flex amendment.

COMMENT 13: Sierra Club and TCE commented that stack tests show that FPP can meet lower emission levels. The de-flex application incorrectly states that "[f]or SO_2 and $PM/PM_{10}/PM_{2.5}$, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal." (Application at 5-1). This statement is untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that "front-half" (or filterable) PM is approximately half of "total" (filterable plus condensable) PM.

RESPONSE 13: The de-flex effort was primarily focused on establishing unit specific emission limits and was not a complete re-evaluation of all permit actions and permit related correspondence prior to the de-flex permit amendment. The comment is not relevant to the review of the application, since the unit specific particulate and SO2 emission rates contained in the de-flex permit are less than the legacy permit particulate and SO2 emission rates that predated the issuance of the flexible permit. The TCEQ expects companies to comply with permit limitations, including permit maximum allowable emission rates, therefore, stack test results indicating actual emissions are below permit allowable is an expectation for compliant emission sources.

COMMENT 14: EPA commented that the application does not summarize New Source

Performance Standards (NSPS), Maximum Achievable Control Technology (MACT) Standards, or SIP emission limits. The application also fails to summarize all Permits by Rule (PBRs) that apply to units under the flexible permit cap.

RESPONSE 14: The permit application and the draft permit summarize information sought by EPA. Specifically, Section 9, General Application Requirements, lists applicable NSPS, MACT and SIP requirements. Section 5.2.2, PBR/Standard Permit Sources and Changes, and Table 5-1, PBRs and Standard Permits Consolidated by Reference, identifies PBR and standard permits at the plant site. Special Condition (SC) Number 2 in the draft permit lists applicable MACT and NSPS. SC Number 24 in the draft permit also lists PBR and standard permits at the plant site. The flexible permit cap will longer exist if this amendment is issued. The compliance caps that remain in the permit only apply to emissions from the main boilers; the boiler EPNs are identified in the MAERT.

COMMENT 15: EPA specifically asked whether activities authorized by PBRs at the site affected emission units under the flexible permit cap. Title V Permit No. O21 issued September 21, 2009, incorporates by reference 11 PBRs. For each emission unit under the flexible permit cap that also has emissions authorized by a PBR, EPA stated that a review should be conducted to determine the total emission limit for the unit, considering all PBRs relevant to the unit. EPA also asked whether activities authorized by any the PBRs affect emission units under the flexible permit cap. If not, a statement should be made for the record that no emission units were affected. In addition, although Table 5-1 in the permit application lists the emission points and associated PBRs (56 PBRs were used), it did not contain a review to determine the resulting final emission limit for the units, considering all PBRs relevant to the units. EPA also asked whether activities authorized by any PBRs revise emission limits of emission units under the flexible permit cap. If not, a statement should be made for the record that no emission units were affected. Sierra Club and TCE commented that LCRA should include the emissions increases associated with the dozens of PBRs and standard permits in its application and include these emissions in ambient impacts analyses.

RESPONSE 15: EPA asked what <u>activities</u> authorized by PBR at the site <u>affected</u> emission units under the flexible permit cap. PBRs can authorize activities and specific sources. Based upon the description of the 56 specific PBRs identified in SC No. 24, most PBRs authorize stand alone emission sources (as that term is defined TCEQ rule at 30 TAC § 116.10(15)) and are not related to other sources at the plant site and could therefore not <u>affect</u> other sources. For example, 18 identified PBR sources authorize internal combustion engines that drive emergency generators and firewater pumps, portable pumps, portable compressors, portable generators, portable lights, and portable welding machines. Thirty (30) other specific PBRs authorize small tanks. The remaining eight PBRs authorize other small emission sources. EPA's questions related to whether activities authorized by any PBRs revised emission limits of emission units under the flexible permit cap are not relevant to the de-flex permit amendment. The executive director notes that the overall caps did not increase over the duration of the flexible permit, actual emission rates did not exceed the PAL permit limits over

the duration of the flexible permit, and both the PAL and the flexible permit would have allowed changes to existing units, provided emission limitations were not exceeded. The executive director evaluates compliance with both major and minor NSR requirements through the enforcement of the PAL and other existing NSR authorizations at the plant. LCRA maintains documentation of all actual emissions, regardless of their NSR authorization (major, minor, PBR, standard permit, qualified facility change) at the plant site in order to comply with the site-wide PAL. Over the duration of the flexible permit, the Regional Office has not noted any circumstances where actual emissions have exceed the PAL as the result of a new emission source being added to the plant site or as a result of a physical or operational change to an existing source at the plant.

COMMENT 16: Mr. Crunk commented that the draft permit should accurately state the fuel source used at the plant, which he states is not lignite as authorized by the draft permit. He also asks whether utility operators should have confidence in the future of coal. He further commented that coal today has dramatically rising costs and faces increasingly competitive alternatives.

RESPONSE 16: The permit amendment was submitted to convert the flexible permit issued under Subchapter G to a Subchapter B permit. No change in authorized fuels was being sought in the de-flex amendment, and therefore no analysis of fuel usage was required or considered. The flexible permit and the legacy permits all contained the same authorized fuels, including lignite. The fuel choice is a decision made by LCRA, not the executive director.

COMMENT 17: EPA asked how maintenance, startup and shutdown (MSS) emissions are regulated at this plant. Mr. Johnson also commented that application exempts LCRA from meeting opacity limits during MSS operations at the plant, stating that opacity limitations should apply during all times of the plant's operations.

RESPONSE 17: The TCEQ received a permit amendment application on January 5, 2010 from LCRA to authorize planned MSS emissions. The MSS amendment is still under review by the executive director who expects that it will be considered for issuance after final action has been taken on the de-flex amendment application.

COMMENT 18: Sierra Club and TCE commented that the de-flex application and draft permit are vague and confusing regarding emissions from MSS activities and malfunctions. They asked whether any hourly limits in the draft permit's MAERT have been established at levels that take into account emissions during MSS. EIP commented that the proposed de-flex permit doesn't include any emission estimates for MSS; by excluding these, TCEQ is misleading the public and hiding the full extent of the emissions increases sought by LCRA. Further, TCEQ cannot authorize the higher MSS emission limits that LCRA wants without first determining that the plant is using BACT to prevent emission spikes during startup and shutdown when the electrostatic precipitator isn't working.

RESPONSE 18: Comments related to MSS are beyond the scope of the de-flex review. A separate amendment application evaluating MSS emissions is pending with the executive director. Section 10.1.3 - MSS Emissions in the de-flex permit application states, "[w]ith the exception of $PM/PM_{10}/PM_{2.5}$ and Pb, the emission limits proposed in this permit application are sufficient to cover all planned maintenance, startup, and shutdown (MSS) events. LCRA has proposed separate MSS emission limits for these pollutants in its MSS permit amendment application for FPP submitted to TCEQ on January 5, 2011. Compliance with MSS limits for $PM/PM_{10}/PM_{2.5}$ and Pb will be based on the representations in the MSS permit application, and any subsequent requirements in that permit amendment."

COMMENT 19: Sierra Club and TCE commented that interim and final "compliance caps" have no basis in law, and perpetuate the illegal and problematic flex permit & PAL Caps. According to the TCEQ staff's Permit Amendment Source Analysis & Technical Review, the Draft Permit contains compliance caps "to ensure the permit action does not result in an increase in allowable emissions." There is no legal or technical basis for including these caps in the Draft Permit. Interim caps are completely irrelevant and should be deleted, because the Unit 3 scrubber upgrade and scrubbers for Units 1 and 2 have been complete and operational for over a year. In addition, the TCEQ's obligation is to ensure that this permit action could not result in increases in *actual* emissions (not Flex Permit allowables, which, as explained, are ridiculously inflated). Unit-specific, BACT-level emission limits should be set at levels to ensure the power plant could not emit more than past actuals.

RESPONSE 19: The executive director disagrees with the comment that compliance caps have no basis in law, that the flexible permit caps and PAL caps are illegal, and that the compliance caps included in LCRA's permit are somehow a perpetuation of the flexible permit program simply because compliance caps have been retained in the draft permit. The de-flex draft permit establishes unit specific emission limits that determine the maximum allowable emission that a single emission source is authorized to emit. In addition to those unit specific emission limits, compliance caps have been included in the draft de-flex permit to limit the maximum emissions that multiple units are authorized to emit, thereby limiting their potential to emit, such that the new de-flex permit would not permit an increase in emissions. The use of compliance caps is not unique to flexible permits. The TCEQ and EPA have included emission caps in other NSR permits to limit the potential to emit of multiple units. The de-flex permitting will establish unit specific allowable emission rates, not unit specific actual emission rates, because the flexible permit caps were based upon summed allowable emission rates, not summed actual emission rates. The unit specific emission rates established in the de-flex permit are primarily based upon BACT at the time the flexible permit was initially issued.

Since the scrubbers have been operational for twelve months, the executive director agrees that the interim emission rates and interim emission caps should be deleted from the draft permit. The interim emission rates and interim emission caps were included in the application and the draft permit because, at the time the

application was submitted, the scrubbers had not operated for twelve consecutive months and compliance with final annual emission limits would not have accounted for operating months prior to the operation of the scrubbers. Changes will be made to the draft permit in response to this comment.

COMMENT 20: EPA commented that the permit should include explicit compliance cap calculation methodologies as a separate condition or as part of the condition for each cap (i.e., method for calculating compliance with the Interim and Final Compliance Caps for Units 1, 2, & 3). Section 8 of the permit application states that "[f]or any pollutant for which the sum of the proposed individual unit limits exceed the Flexible Permit emissions caps, compliance caps are being established that are less than or equal to the current Flexible permit caps." The application also states that individual emission limits for NOx, SO_2, interim PM, H_2SO_4, HCL, and HF were calculated without the 9% allowance originally included in the flexible permit cap. EPA asked whether the individual numbers were reduced 9%, and, if so, why does the sum of the emissions for these pollutants exceed the flexible permit emission cap.

RESPONSE 20: It is not necessary to add a separate permit condition instructing the permit holder to sum up emission rates from only three emission sources to show compliance with the compliance caps, when those caps only cover three sources. SC 15 in the draft permit already specifies how compliance will be demonstrated for each emission source.

Section 5, Emission Rate Basis, of LCRA's de-flex application, identifies both the general approach used to establish unit specific emission rates from the coal-fired boilers and the specific basis for each pollutant's emission limit. LCRA's application describes the general approach in establishing unit specific emission limits as follows:

> **These emission limits were established for each boiler by first subtracting the flexible permit 9% allowance if present in the caps and then subtracting emissions within the cap for facilities at FPP other than boilers. The remaining emissions cap, which includes only the boiler contributions, was then allocated among the three boilers based upon operating and design data described below. In general, the unit specific maximum daily heat inputs from the 1995 - 2002 period (daily heat input parameter) that were used as a basis for the creation of the flexible permit final caps are used as the basis to allocate the hourly and annual emissions caps to each boiler. Annual emission rates determined by TCEQ to be BACT at the time of the original flexible permit issuance are generally used to establish individual unit emission limits. For pollutants for which a revised emission rate was determined to be necessary, the individual unit emission limits were calculated using the revised rate. If the sum of the individual unit limits exceeds the current flexible permit cap, a compliance cap (without the 9% allowance) is being retained in the permit as an additional limit.**

Table B-1 in Appendix B, Emission Calculations, in LCRA's de-flex application

specifically identifies that the previous flexible permit caps were retained as compliance caps for CO and VOC on an annual basis (ton per year) and for SO_2, CO, H_2SO_4, HCl, and HF on a short-term basis (pound per hour). The annual emission compliance caps for CO and VOC did not include the 9% allowance because the original flexible permit caps for these pollutants did not include the 9% allowance. The 9% allowance was not a factor in the establishment of unit specific annual emission limits for each of the three boilers for the other pollutants because the summed individual emission limits were less than the existing flexible permit caps and those caps were not retained as compliance caps.

Short term compliance caps that limited the emissions of CO, SO_2, H_2SO_4, HCl, and HF were retained in the de-flex permit. All of these pollutants except CO are acid gases whose emission rates were based upon scrubber operating scenarios. The initial flexible permit established an emission cap based upon an operating scenario that assumed all three scrubbers would operate collectively. In contrast, the unit specific emission limits in the de-flex draft permit are based upon how any single scrubber could operate. To simply sum the potential unit specific emission rates would result in a different operating scenario for how all three units could operate that was not contemplated nor requested by LCRA. Because LCRA represents that the FPP will not operate with more than one scrubber at reduced removal efficiency, LCRA proposed an hourly emissions compliance cap for all three units, in addition to the unit specific emission rates, which is more stringent than the sum of the proposed individual unit limits and the existing flexible permit hourly cap to insure site-wide emissions would not be increased.

COMMENT 21: EPA suggested that for clarity, the proposed interim and final compliance cap names reflect the basis for the cap (for example, the "steam electric generator cap").

RESPONSE 21: Additional identification of caps is not necessary because the de-flex permit amendment already identifies which sources and emission points numbers (EPN) that are under the cap. The de-flex MAERT identifies EPN FPP-1N, FPP-2N, FPP-3N, and "Final Compliance Cap for Units 1, 2, and 3."

COMMENT 22: EPA commented that the permit should reference how compliance caps comport with federal requirements and are consistent with SIP requirements, and suggested adding language in the Maximum Allowable Emission Rate Table (MAERT) footnotes to state the basis for setting cap limits.

RESPONSE 22: The information suggested to be included as a footnote in the MAERT has already been included in the permit application in Section 5, Emission Rate Basis, Appendix B, Emissions Calculation, and Section 9, General Application Requirements. These sections of the application discuss compliance with applicable federal rules and the SIP. This information has traditionally been included in NSR permit applications and has traditionally not been included in the MAERT for a variety of reasons. The information suggested to be included as footnotes to the MAERT will be retained in the permit. In addition, Subchapter B

permit applications must include a demonstration regarding applicability of and compliance with major NSR permit requirements. Finally, TCEQ rule 30 TAC § 116.116(A)(1) provides that representations in the application are part of the permit and therefore enforceable.

COMMENT 23: Sierra Club and TCE commented that the draft permit should contain a heat input limit for unit 3, or LCRA must apply for an amendment and demonstrate compliance at the higher heat input levels. Specifically, LCRA should explain how its originally permitted 4,735 mm/Btu/hour (maximum rated capacity) Unit 3 boiler has increased capacity by 30 percent. TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved PSD permits, then the application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

RESPONSE 23: This permit amendment application was submitted to convert the existing flexible permit issued under TCEQ rules in Chapter 116, Subchapter G to a Subchapter B permit and establish unit specific emission limits. The permit amendment does not authorize any new facilities, nor does the amendment authorize any modification to existing facilities. The permit amendment does not authorize an increase in allowable emission rates for any existing or new air contaminants; therefore, BACT and impacts reviews were not triggered. The facilities currently authorized by the flexible permit were previously permitted prior to authorization of those sources by the flexible permit issued on October 10, 2002, and were subject to BACT reviews at the time they were originally permitted and when the flexible permit was issued in 2002. Reevaluation of previous BACT determinations was not triggered by this amendment to convert the flexible permit to a Subchapter B permit, therefore, it is not appropriate to include BACT related permit limitations, such as heat input limits, as part of this de-flex permit amendment.

COMMENT 24: Regarding Page 1, SC 3 in the draft permit, which states that LCRA will "voluntarily limit emissions of nitrogen oxides (NOx) to 9,522 tons per year (tpy)... permit holder agrees to make the 9,522 tpy limits between Units 1, 2, and 3 federally enforceable with this permit condition," EPA asked why the word "voluntary" is included in the condition if it is listed as an emission limit in Permit Number PAL2 , and why this emission limit for NOx is the only PAL emission limit was referenced in this permit.

RESPONSE 24: SC 3 <u>and</u> Footnote Number 5 to the MAERT were added to the permit in February 2006. Footnote Number 5, which stated "The final cap for NOx emissions becomes effective on December 31, 2006," was deleted from the current draft de-flex MAERT, since that date has passed. SC No. 3 was not changed in the current draft de-flex permit, nor was SC 11. SC 11 included the phrase "except for the final NO_x emission limits which take effect no later than December 31, 2006." The executive director recognizes EPA's source of confusion because

SC3, SC11, and Footnote 5, from the previous MAERT, are not specifically linked in the permit. In 2006, LCRA proposed to accelerate the final NOx plant-wide emission limit from an effective date of October 10, 2012 to December 31, 2006, thereby contributing to the Austin/Round Rock Clean Air Action Plan. The word "voluntary" was used to reflect the early emission reductions that were made in an effort to assist in a regional plan to reduce ozone formation. Note that the existing permit and PAL limit of 9,522 tpy of NO_x is approximately 970 tpy below the SIP reductions required by existing Texas rules.

COMMENT 25: Regarding the draft permit, EPA commented that SCs 8, 9, and 10, concerning minimization of dust emissions at coal stockpiles at the power plant, should include requirements for periodic monitoring, recordkeeping, and reporting to demonstrate compliance with the requirements.

RESPONSE 25: Section 10.2, Compliance Demonstration - Material Handling Sources, in LCRA's de-flex application, identifies how LCRA will demonstrate on-going compliance with material handling emission limits. Additionally, SC 19E in the draft permit requires the permit holder to keep records of process parameters necessary to demonstrate compliance with the emission sources not equipped with a CEMS. This includes the requirement for coal throughput records to show compliance with material handling emissions, including estimated coal pile emissions.

COMMENT 26: Regarding the draft permit, EPA commented regarding Page 4, SC 13, asking how TCEQ plans to ensure compliance with new unit specific emission limits for emission point numbers FPP-1N, FPP-2N, and FPP-3N. EPA also asked whether stack testing is required.

RESPONSE 26: Sections 10.1.1, 10.1.2, and 10.1.3, Compliance Based on CEMS and Compliance Based on Stack Sampling, of LCRA's de-flex application, identifies how LCRA will demonstrate on-going compliance with emission limits from EPNs FPP-1N, FPP-2N, and FPP-3N. SC 15 in the draft permit requires CEMS for compliance with NO_x and SO_2 emission limits. SC 15 also requires compliance with emissions not measured by a CEMS to be demonstrated by calculating emissions based upon the actual heat input to the unit and emission factors based upon the most recent stack sampling results. The draft permit does not require additional stack testing because stack testing was recently conducted upon startup of the new scrubbers.

COMMENT 27: Regarding the draft permit, EPA commented regarding Page 6, SC 13 and 15. For emission point numbers FPP-1N, FPP-2N, and FPP-3N, EPA asked why the permit does not establish ongoing periodic monitoring frequencies for CO, VOC, and PM to ensure compliance with new individual emission limits, stating that the draft permit only requires continuous ongoing monitoring for NOx and SO_2.

RESPONSE 27: SC 15c requires compliance with emissions not measured by a CEMS to be demonstrated by calculating emissions based upon the actual heat

input to the unit measured on an hourly basis and emission factors based upon the most recent stack sampling results. The periodic monitoring frequency established in the draft permit is adequate to demonstrate compliance with permit and other regulatory emission limits. LCRA will be required to comply with EPA's Mercury Air Toxics Standard (MATS) rule in addition to the specific conditions in the de-flex permit. The MATS rule contains periodic monitoring requirements for particulate matter that can be used to demonstrate compliance with permit limits. Additionally, the executive director agrees with EPA's conclusion in the MATS rule that because organic HAP and VOC emission rates are typically so small, compliance with work practices prescribed by the MATS rule is sufficient periodic monitoring to insure organic HAPS and VOC emissions are minimized. The passage below from the adopted MATS rule (77 Federal Register, page 9369, published February 16, 2012) articulates EPA's rationale for requiring work practices in lieu of a numerical standard and subsequent stack tests to show compliance with the numerical standard for organic HAPS.

> **We are finalizing work practice standards because the significant majority of data for measured organic HAP emissions from EGUs are below the detection levels of the EPA test methods, even when long duration (around 8 hour) test runs are considered. As such, we consider it impracticable to measure emissions from these units. As discussed at proposal, we believe the inaccuracy of a majority of measurements, coupled with the extended sampling times used, allow a work practice standard under CAA section 112(h) to apply to these HAP. We believe that a work practice standard will lead to a better environmental outcome than would be obtained through a requirement to measure a pollutant for which results may or may not be obtained. We believe that the work practice standard will result in actions being taken that will reduce emissions of these HAPs.**

Additional periodic monitoring beyond the periodic monitoring required by EPA's MATS rule, as well as by the continuous compliance demonstration requirements in the draft permit, and the discretion of the executive director to request compliance demonstrations in the permit and in TCEQ rule for all contaminants, is not necessary.

COMMENT 28: Sierra Club and TCE commented that SC 21 is vague and confusing, surplusage, and should be removed. They request TCEQ provide the purpose and meaning of SC 21. Commenter also states that the draft de-flex permit assumes there is no difference in the size of particles released from the plant, i.e., that the total amount of particulate matter emitted from the boiler stacks and the amount of fine particles (smaller than 2.5 microns) are one and the same, and that there is no basis for that distinction, as both TCEQ and LCRA should know. In fact, LCRA has long distinguished between particle size in its annual emission inventory report

to TCEQ, in which it provides separate emission estimates for PM-10 and PM 2.5. Federal rules have not allowed the use of "total" particulate matter as a surrogate for PM 2.5 for a long time, and no longer allow PM-10 to stand in for PM 2.5. The permit should be amended to set a separate limit for PM 2.5, which should be significantly lower than the limit for total particulates proposed in the draft de-flex permit. That limit can be determined through stack testing, or by using long available methods, such as AP-42 emission factors, to arrive at the appropriate standard.

RESPONSE 28: SC 21 was carried forward from previous permits. The review of this de-flex application was focused on establishing unit specific emission limits and not re-writing the entire permit; therefore, existing permit conditions were largely retained. The purpose of this condition is to remind the permit applicant of its reporting requirement obligations in the TCEQ's general rules. Comments related to particulate emission rates were addressed in Section 5, Emission Rate Basis, of LCRA's de-flex application. Section 5 acknowledges the potential difference in particle sizes that can exist in the exhaust streams of coal-fired boilers controlled by electrostatic precipitators; however, the application also acknowledges the lack of unit specific particle size data necessary to establish individual unit specific emission limits. Given the particle size uncertainty and that the original flexible permit caps were established for PM and PM_{10}, LCRA proposed one single emission limit for all three particle size fractions. The referenced PM_{10} surrogate policy applied to applicants for PSD permits or existing PSD permit holders proposing major modifications requiring PSD permit authorization. The executive director agrees that EPA's PM10 surrogate policy is no longer in effect, but the policy is irrelevant and would otherwise not be applicable to this permit action because LCRA's de-flex application is neither an application for a new PSD permit or a major modification of an existing PSD permit. The executive director is unaware of any EPA rule or policy that requires existing major or minor NSR permit holders to submit permit amendments simply to establish fine particulate emission rates for emission sources with existing particulate emission rates. The executive director will require LCRA to propose specific particle size emission rates for the utility boilers the next time LCRA submits a PSD application proposing to modify those sources in accordance with current EPA rules.

COMMENT 29: Several commenters were concerned about the potential for adverse effects on health, public welfare, and the environment as a result of the plant's emissions. (Mr. Johnson, Ms. Leech, Mr. Mikus, Ms. Pantell, Greenpeace, Ms. Robbins, Ms. Sliva, Mr. Westbrook). Mr. Westbrook commented that coal dust causes cancer. Mr. Johnson commented about LCRA's proposed use of 100% lignite and/or sub-bituminous coal, the lack of speciation in the application between PM (specifically between PM10 and PM2.5), and emissions exceeding opacity limits during startup, shutdown, and maintenance procedures at the plant. He also commented that LCRA should request emission limits in its permit that are protective of human health and the environment. Mr. Johnson also stated that the TCEQ should also require air monitors to enable proper enforcement of state and federal regulations. Mr. Crunk suggested if LCRA does not provide the TCEQ with air dispersion modeling reflecting that emissions from

the plant will not cause or contribute to air pollution, he suggests LCRA close its plant entirely to be protective of the public's health, the general welfare, and the environment.

Mr. Crunk commented that the emissions from FPP have been documented by EPA to travel hundreds of miles. Mr. Mikus commented that he has been told, and that there are studies, which show the hazardous emissions from FPP reach Houston, Texas. He also commented that the plant has been emitting mercury poisons and other toxic metals for more than three decades now. He wants to know the cumulative amount of mercury that has been emitted from the FPP, from its inception to now, and how far the emissions, like mercury and other types of similar poisons, or hazardous substances, travel to reach big metropolitan areas like Houston. Mr. Mikus further asks if anyone has ever considered the health care costs of coal and asked whether the TCEQ has ever studied the effects of mercury and ultrafines on the progression of Alzheimer's disease.

Greenpeace submitted a comment to the TCEQ discussing the "Annual Estimated Health Effects" from the plant which detailed the estimated effects of several contaminants proposed to be emitted from the plant, including NOx, SO2, PM and VOC. He also commented about the emissions of mercury and lead, commenting about the safe level of emissions of these contaminants for human health and the environment. Greenpeace also commented about the deaths of pecan trees in groves in the surrounding area, attributing it to sulfur emitted from the plant. Greenpeace further commented that the TCEQ is infamous for protecting the economic interests of regulated entities rather than the health of the public and environment.

Sierra Club and TCE commented that the application and draft permit do not demonstrate levels of emissions that will be protective of human health and the environment. Ms. Leech asked how the amendment will protect the air quality for the welfare of future generations. Mr. Bustillo stated that the coal industries are causing environmental damage that is more costly than the money they generate, and that more protection is needed from dirty polluters.

RESPONSE 29: An impacts review was not triggered since there will be no change in either actual or allowable emissions. The permit amendment does not authorize an increase in allowable emission rates for any pollutant. The amendment does not authorize any new equipment or modification to existing equipment; therefore, as a result of this amendment, actual emissions will not change. Air dispersion modeling is typically used in an NSR permit review to evaluate emissions that have not been emitted because a proposed new source or change to an existing source has occurred. In LCRA's case, the FPP is an existing authorized plant with two coal-fired units operating for over thirty years and a third coal-fired unit operating for over twenty years. The effects of existing emission sources are most appropriately evaluated with ambient air quality monitoring data when available. Data from Continuous Air Monitoring Station 601 (CAMS 601), a nearby monitor that monitors SO2 and other criteria pollutants, has been evaluated by the executive director's staff and compared to the NAAQS. EPA establishes the NAAQS to be protective of public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly and to be protective of public welfare, including protection against

decreased visibility, damage to animals, crops, vegetation, and buildings. Monitoring values at CAM 601 are and have been below the NAAQS; therefore, existing emissions from FPP do not appear to endanger human health and the environment. Current and past monitored pollutant values from CAM 601 are available to the general public on the TCEQ web site at the following link: http://www5.tceq.state.tx.us/tamis/index.cfm

The executive director also evaluated, as part of permit application reviews in the past, air dispersion modeling of emissions from FPP for pollutants, including several acid gases that are not monitored by CAM 601. Past reviews of air dispersion modeling evaluated the maximum off-property concentration of air pollutants from FPP. Air dispersion modeling also predicted air pollutant concentrations resulting from FPP emissions that would not be expected to endanger human health or the environment.

Excess emissions, which are emissions that exceed limits established in permits and rules, including excess opacity, are not authorized and are subject to enforcement action.

COMMENT 30: Sierra Club, TCE, Mr. Crunk and Mr. Johnson commented that the application contains no ambient impacts analyses, and TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution. Mr. Johnson suggested that the TCEQ require LCRA to submit comprehensive air dispersion modeling to anticipate changes that might affect the surrounding environment and public health standards. Mr. Crunk also suggested that the LCRA should provide the TCEQ with air dispersion modeling reflecting that emissions from the plant will not cause or contribute to air pollution.

RESPONSE 30: An impacts review was not triggered since there will be no change in either actual or allowable emissions, and therefore modeling was not required as part of the application. The permit amendment does not authorize an increase in allowable emission rates for any pollutant. The amendment does not authorize any new equipment or modification to existing equipment; therefore, as a result of this amendment, actual emissions will not change. See Response 29 for further discussion of existing emissions and air quality.

COMMENT 31: Ms. Leech wants any reports that LCRA is required to maintain on mercury emissions which are sent to the EPA to also be released in a format that the general public can easily understand. She suggested the reports contain information about how much mercury is emitted and its effect on different population groups, such as the young, the elderly and sensitive sub-groups of those.

RESPONSE 31: Once it is recorded in a form suitable for distribution, the mercury emissions data collected and retained by LCRA from mercury CEMS required by EPA's MATS rule is submitted to TCEQ, and are available through a public information request to the TCEQ Region 11 Office. Utilities have three years to

install mercury controls and monitors under MATS, which became effective April 16, 2012. Currently, LCRA and other utilities are required to report toxic emissions, including mercury emissions, to EPA in the form of a toxic release inventory. The TRI is easily accessible on the internet at: http://www.epa.gov/tri. The effects of mercury emissions and other emissions on different population groups will depend on the exposure amount or concentration. Stack emissions have to be converted to concentrations in order for their effects to be evaluated; stack emissions are generally converted to concentration with dispersion models. Additionally, ambient monitors can record concentrations resulting from stack emissions. EPA's MATS rule does not require analysis of the effects of mercury emitted by FPP emissions, nor are there any on-going reports that would require continuous consideration of mercury emissions. Any analysis of the effects of mercury on different population groups is beyond the scope of the review of the de-flex application. Instead, the executive director has evaluated prior modeling of maximum allowable emission rates from FPP to insure the protection of public health.

COMMENT 32: Mr. Mikus wants to know how to give the TCEQ more authority to protect Texans. He specifically asked what it takes for our state law makers have to give TCEQ and LCRA, more statutory authority and responsibility to protect Texans.

RESPONSE 32: The TCAA specifically requires the TCEQ determine that no adverse effects to human health and public welfare are anticipated before any authorization to construct facilities that will emit air contaminants. The executive director made this determination when permit 51770 was issued on October 10, 2002. The de-flex application does not request new construction or modification of facilities, nor increases in or any new air contaminants. Therefore, the executive director has determined that the emissions from FPP are not expected to cause any adverse off-property impacts, in compliance with the TCAA.

COMMENT 33: EPA commented that LCRA should have amended its Title V Permit to incorporate conditions assuring compliance with federally applicable requirements prior to submitting an application requesting a conversion of its Subchapter G permit into a Subchapter B permit.

RESPONSE33: EPA did not explain what federally applicable requirements and compliance issues are of concern to EPA. Regardless, comments regarding any requirements of the Title V permitting program are not relevant to the de-flex application or review process.

COMMENT 34: Sierra Club and TCE commented that LCRA's compliance history necessitates a more careful review before the permit should be issued. Specifically, they stated that LCRA reported less PM emissions than it should have and this is not only a reporting violation but also resulted in substantial underpayment of fees. The commenters submitted a copy of a letter, with supporting documentation, from the Environmental Integrity Project to Mark Vickery, TCEQ Executive Director dated January 12, 2011 requesting the TCEQ initiate an enforcement action

to recover fees due to TCEQ, and also to review its emissions inventory and emissions fees procedures to ensure a full and accurate accounting of total PM emissions consistent with Texas and federal law is made by all entities subject to these requirements. EIP also commented that LCRA has never provided the state or the public with accurate or consistent reports of the amount of particulate matter it is actually releasing to the air.

RESPONSE 34: During the technical review, a compliance history review of the company and the site is conducted based on the criteria in Title 30, Chapter 60 of the TAC. These Rules may be found at the following website: http://www.tceq.state.tx.us/rules/index.html. The compliance history for the company and site is reviewed for the five-year period prior to the date the permit application was received by the Executive Director. The compliance history includes multimedia compliance-related components about the site under review. These components include the following: enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs and early compliance.

This permit application was received after September 1, 2002, and before September 1, 2012, and the company and site have been rated and classified pursuant to Title 30, Chapter 60 of the Texas Administrative Code. A company and site may have one of the following classifications and ratings:

High: rating < 0.10 (above-average compliance record)

Average by Default: rating =3.01 (these are for sites which have never been investigated)

Average: 0.10 < rating < 45 (generally complies with environmental regulations)

Poor: 45 < rating (performs below average)

This site has a rating of 0.1 and a classification of average. The company rating and classification, which is the average of the ratings for all sites the company owns, is 2.8, which is also average. No additional permit actions are required for companies have average or above average compliance histories.

With regard to the issue of reporting PM emissions, the executive director's staff reviewed the information submitted by EIP in 2011, and then the emissions inventories submitted by LCRA. Subsequently, LCRA submitted revised emissions inventories for PM emissions for the years 2007-2010, and paid the additional fees invoiced by the agency.

COMMENT 35: Commenters asked about water usage by the plant and groundwater monitoring wells and commented about the constraints of water on the plant. Greenpeace asked how much water is used by the plant and about its storage in Lake Fayette, adding that given the state's recent drought, the water used by the plant is not a good use of the state's water. Mr. Mikus commented that Texas agriculture and the growing Texas population need water, while

coal use wastes water. He asked whether that cost has been considered by LCRA as it continues to use coal at its plant. Mr. Mikus also wants to know why the rain ceases to fall in Eastern Fayette County when it encounters the FPP stacks, and commented that the intensity and duration of the Texas drought was primarily caused by the 21 coal fired power plants in Texas. Mr. Hayek commented about any existing groundwater monitoring wells on the property and asked whether the permit will extend groundwater monitoring wells onto surrounding private property. Mr. Crunk commented that power plants are facing unprecedented environmental constraints, especially with regards to the use of water, adding that power plants are notoriously thirsty, using as much or more water than is used for irrigation in agriculture.

RESPONSE 35: The application and permit that were subject to comment are governed by the requirements of the TCAA, which does not regulate the use, amount or quality of surface water or groundwater. Therefore, these comments are beyond the scope of the review of this application.

COMMENT 36: Mr. Hayek asked about coal ash from the plant, and whether it will contain the same contaminants in the future as it does today. He also asked about an existing ash pond on site, whether it was restituted, had a liner, what construction took place to put the pond in place, where the ash was complied, who it was sold to, and for what purposes was it "instigated" in to.

RESPONSE 36: The application and permit that were subject to comment are governed by the requirements of the TCAA, which does not regulate coal ash. The handling of coal ash is governed by other state and federal requirements, which were not applicable to the de-flex application or the preparation of the draft permit. LCRA is responsible for compliance with applicable law regarding handling of coal ash.

CHANGES MADE IN RESPONSE TO COMMENT

In response to public comment, the Executive Director has changed certain provisions of the draft permit. As noted in Response 10, interim emission rates and interim emission caps will be deleted from the draft permit. These emission rates are only located in the attached Maximum Allowable Emission Rates Table.

Respectfully submitted,

Texas Commission on Environmental Quality

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