June 22, 2016

VIA ELECTRONIC FILING

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Rio Grande LNG, LLC and Rio Bravo Pipeline Company, LLC
Docket Nos. CP16-454-000 and CP16-455-000

Dear Ms. Bose:


Should you have any questions about this filing, please feel free to contact the undersigned at (202) 662-4555.

Respectfully submitted,

/s/ Erik J.A. Swenson

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EJAS/AC
Enclosures

cc: Gertrude Johnson (FERC)
Jennifer McCoy (Edge Engineering and Science, LLC)

CONSOLIDATED ANSWER OF RIO GRANDE LNG, LLC AND RIO BRAVO PIPELINE COMPANY, LLC IN OPPOSITION TO THE MOTIONS TO INTERVENE, THE PROTESTS, AND THE COMMENTS FILED BY VARIOUS ENTITIES

Pursuant to Rules 213 and 214 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure,¹ Rio Grande LNG, LLC (“RG LNG”) and Rio Bravo Pipeline Company, LLC (“RB Pipeline”) (collectively, the “RG Developers” or the “Applicants”), hereby answer the motions to intervene, protests,² and comments filed between May 6 and June 9, 2016, inclusive in the above-captioned proceedings (“RG Developers Dockets”).

I. Background

On May 5, 2016, RG Developers filed an application (“Application”) pursuant to Section 3 of the Natural Gas Act (“NGA”)³ requesting authorization to site, construct, and operate a natural gas liquefaction facility and liquefied natural gas (“LNG”) terminal (collectively, the “Terminal”) to be located on an approximately 984-acre parcel of land

² The Commission may entertain an answer not only to the motion and comments portions of the Sierra Club Filing, but also to its protest portion. See S. Nat. Gas Co., 110 FERC ¶ 61,052, at P 27 (2005) (noting Commission’s “practice of allowing answers to protests to be filed where the Commission is assisted in its deliberations by the availability of a more accurate and complete record”).
to be leased from the Brownsville Navigation District in Cameron County, Texas, which parcel is situated along the north embankment of the Brownsville Ship Channel ("BSC").

The Application also included RB Pipeline’s request for authorization pursuant to Section 7(c) of the NGA to construct, own and operate the Pipeline System, comprised of twin, approximately 137-mile-long, 42-inch-outside-diameter, parallel, natural gas pipelines sharing a right-of-way ("ROW"), three 180,000-horsepower (at full build out) compressor stations, two 30,000 horsepower interconnect booster stations for injection of additional gas into the Pipeline System from existing natural gas pipelines (downstream from Compressor Station 1), six mainline valve sites with two valves per location (one for each pipeline), four metering sites that house a total of six meter stations along the Pipeline System’s approximately 2.4-mile-long header system, as well as additional ancillary facilities, including, but not limited to, access roads, and temporary contractor/pipe yards. On May 19, 2016, the Commission issued a Notice of Application in the RG Developers Dockets. On May 20, 2016, the Commission issued an Errata Notice correcting certain minor aspects of the Notice of Application and setting a June 9, 2016, deadline for comments and intervention motions.\(^4\) Between the filing date of the Application and June 9, 2016, 63 individuals and 15 organizations made submissions tagged to the RG Developers Dockets.\(^5\) Each of these submissions is identified in Appendices A and B hereto and assigned a number for ease of reference herein.

\(^4\) On May 19, 2016, the Commission issued a Notice of Application in CP16-454-00, CP16-455-000, and PF15-14-000 for Rio Grande LNG, LLC and Rio Bravo Pipeline Company, LLC. See 81 FR 33519 (May 26, 2016). The heading and comment date contained incorrect information. However, the Errata Notice with the correct information was issued on May 20, 2016.

\(^5\) Twenty-one motions to intervene were filed late on June 10, 2016. Submission Nos. 74-94 in Appendix A were filed late without any grounds or leave from the Commission despite the fact that the Notice of Application was explicit about the deadline for submission.
II. Answer

A. Motions to Intervene

Motions to intervene, when granted, provide intervenors with certain additional rights beyond being heard by the Commission. In particular, an intervenor has the right to seek rehearing from the Commission and, in the event that an intervenor properly and timely files a Request for Rehearing that is ultimately denied by the Commission, such intervenor has the right to appeal through the Federal courts the denial of such request. Thus, the granting or denial of intervenor status has important implications for the would-be intervenor, the Applicant, the Commission, the Commission’s processes, and potentially the Federal court system and its processes.

The RG Developers recognize that the Commission takes a modern approach to pleadings and emphasizes substance over form, often granting intervenor status to novice participants that do not fully comply with the letter of FERC’s regulations governing interventions. The RG Developers generally endorse such an approach. However, over the past year or more, there has been evidence of growing disrespect for the Commission’s processes marked, not just by disruption outside of the Commission’s Washington, DC headquarters, but also within the Commission’s meeting room while the Commission is in session. Unlike entities seeking to intervene in good faith but who inadvertently fail in their efforts to comply with the Commission’s rules, entities that show absolutely no regard for the Commission’s rules do not deserve to be rewarded with intervenor status. The Commission has started taking deliberate steps6 to restore order to its own processes and preserve its ability to conduct its affairs and ensure those making a

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good faith effort to participate in an order fashion within the rules would not be prejudiced by actions of those who find it more convenient or effective to ignore the Commission’s rules.

In the Pre-filing docket (PF15-20) preceding the current, formal, application proceedings, the Commission also took innovative action to ensure stakeholders could be heard, while excluding disruptive elements. Specifically, those wishing to be heard (at the scoping meeting for this project and two other projects held in Port Isabel, TX on August 11, 2015) were required to present oral comments individually, in an orderly fashion, rather than speaking in front of everyone assembled at the scoping meeting in a manner that would have encouraged out-of-turn remarks from the crowd.

Now, the Commission is faced with another threat of disruption to its processes – albeit via written filings. Specifically, the vast majority of the current submissions purporting to be motions to intervene demonstrate an utter lack of a good faith effort to meet any of the Commission’s regulations setting forth the requirements for petitions to intervene. Specifically, those requirements include:

- Any person filing a petition to intervene or notice of intervention shall state specifically whether he seeks formal hearing on the application.\(^7\)

- A motion must contain a clear and concise statement of (1) the facts and law which support the motion; and (2) the specific relief or ruling requested.\(^8\)

- A motion to intervene must state the position taken by the movant and the basis in fact and law for that position.\(^9\)

- A motion to intervene must also state the movant’s interest in sufficient factual detail to demonstrate that (i) the movant has a right to participate which is expressly conferred by statute or by Commission rule, order, or

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\(^7\) 18 C.F.R. § 157.10 (2015).

\(^8\) 18 C.F.R. § 385.212(c) (2015).

other action; (ii) the movant has or represents an interest which may be directly affected by the outcome of the proceeding, including any interest as a consumer, customer, competitor, or security holder; or (iii) movant’s participation is in the public interest.10

- A filing must begin with a caption that sets forth the docket designation, title of the proceeding if a proceeding has been designated, a heading which describes the filing, and the name of the participant for whom the filing is made.11

- Any filing with the Commission must be: (1) [t]ypewritten, printed, reproduced, or prepared using a computer or other word or data processing equipment; (2) [h]ave double-spaced lines with left margins not less than 1½ inch wide, except that any tariff or rate filing may be single-spaced; (3) [h]ave indented and single-spaced any quotation that exceeds 50 words; and (4) [u]se not less than 10 point font.12

- Any participant filing a document in a proceeding must serve a copy of the document on each person whose name is on the official service list, and any other person required to be served under Commission rule or order or under law and a certificate of service must be attached to the document and have the proper language.13

The Commission’s May 19, 2016 Notice of Application in the RG Developers’ Dockets expressly called attention to these requirements stating:

[An]y person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before the comment date stated below, file with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10).

The Commission’s Notice went on to explicitly note: “A party … must mail a copy to the applicant and to every other party in the proceeding.”

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12 18 C.F.R. § 385.2003 (2015). The RG Developers recognize that it would be inappropriate to insist of literal compliance with some of these requirements (e.g., left margins of 1 and ½ inches) where the filing is being submitted electronically.
Despite these clear instructions, all but a handful of the motions to intervene filed, failed to comply with any of the Commission requirements for motions to intervene, not even the mailing/service requirement set out directly in the Notice.\footnote{Notably, the motions by Defenders of Wildlife ("DoW"), Vecinos Para El Bienestar de la Comunidad Costera, the Sierra Club, and the joint motion of Roberto de los Santos, Beatriz Zurita, and Raul Zurita evidence a good faith effort to comply with the Commission’s rules, even if some of these still failed to completely comply with the letter of such rules.} Further, none of these submissions makes any assertion that the submitters lacked ready access to the Commission’s rules or even asked for forbearance (waivers) with respect to compliance with the Commission’s rules. Indeed, all of the submissions appear to have been submitted via e-mail, suggesting the submitters had access to the internet and, thus, ready access to copies of the Commission’s rules.

The Commission should deny those motions to intervene that evidence a complete disrespect for the Commission regulations and processes by failing to meet any of the Commission requirements ("Broadly Deficient Interventions"), absent some indication that the would-be intervenor made a good faith effort to inform itself of, and comply with, the Commission’s published requirements.\footnote{The RG Developers submit that submissions 1-36, 38-40, 43-52, 54-58, and 60-94 constitute Broadly Deficient Interventions.} To grant intervenor status to any entity submitting one of the Broadly Deficient Interventions would encourage further erosion of orderly Commission proceedings, as well as prejudice the RG Developers and other stakeholders in several respects, including:

(1) It is impossible to tell whether a hearing is being sought by any of the Broadly Deficient Interventions;

(2) It is unclear as to what law and facts form the basis of the arguments to which the RG Developers must respond and on what basis the Broadly Deficient Interventions might validly appeal any decision of the Commission in these proceedings;
(3) It is unclear whether the submitters of Broadly Deficient Interventions have a cognizable interest giving standing to participate or their participation as an intervenor is otherwise in the public interest; and

(4) It is not possible to confirm whether some of the Broadly Deficient Interventions are actually intended for the RG Developers Dockets or one of the other LNG projects proposed to be sited along the BSC.16

With respect to item (1), the Commission could remedy this issue by deeming each of the entities submitting a Broadly Deficient Interventions to have waived any right to hearing in the matters under review in the RG Developers Dockets. Unfortunately, there are no easy remedies for the harm to other participants in these proceedings related to items (2), (3) and (4).

The failure of the Broadly Deficient Interventions to serve the RG Developers with their motions is also significant. While some might suggest that the RG Developers should not be prejudiced by this deficiency because the RG Developers can simply monitor the FERC’s e-library site and receive e-mail alerts of filed motions in the RG Developers Dockets, this ignores the fact that the Commission’s e-library service was suffering from multiple outages over several days during the period when the filings were being made. This prevented the RG Developers and their counsel from being able to promptly review a large majority of the Broadly Deficient Interventions to analyze

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16 While the Broadly Deficient Interventions have all been assigned to one or more of the RG Developers’ Dockets, many of them do not raise any facts tying the submission with particularity to any of the RG Developers’ Dockets. Moreover, several either refer exclusively to a project not being developed by the RG Developers, raise facts pointing to a project not being developed by the RG Developers, or otherwise indicate a lack of understanding as to which proceeding their submission related. For example, Submission No. 1, a filing by Dr. Terence Garrett states that Dr. Garret “do[es] not want to see [his] property devalued by polluting fossil fuel industries such as Texas LNG” and “wish[es] to preserve [his] rights should [he] need to bring a legal challenge against Texas LNG in the future.” Similarly, Submission No. 50 by Charles W. Doughty voices objection to the facility on the basis that it is within two miles of where he lives and within three miles of the SpaceX rocket launch facility, and Submission No. 47 by the Long Island Village Owners Association expresses concerns for homes “less than 1.5 miles from the proposed Rio Grande LNG site.” However, the RG LNG Terminal site is not within two miles of any residences, is approximately 2.5 miles or more from homes in Long Island Village, and is more than three miles from the SpaceX rocket launch site.
whether a response was warranted and prepare such response. While the RG Developers could have requested a waiver of the Commission’s rules and sought an extension of the time to file an Answer, this would have unfairly placed the risk and burden on the RG Developers. Moreover, it appears that one popular tactic of LNG project opponents is to try to stretch out the time required for the Commission to conduct its review. Consequently, rather than curing the issue created by the lack of service of the Broadly Deficient Interventions on the RG Developers, an extension of time would prejudice the RG Developers while rewarding the would-be intervenors seeking to oppose the Project.

Were the shortcomings of the Broadly Deficient Interventions merely a matter of failure to follow form (e.g., used the wrong margins or spacing), the Commission would be justified in looking past these deficiencies. However, as noted above, the deficiencies here are across the board, involving both matters of form and substance with consequences on the ability to process the RG Developers’ Application and the rights of the parties going forward. As such, the benefits to the public of overlooking the overwhelming deficiencies in these submissions are outweighed by the benefits to the public of encouraging at least good faith efforts at complying with the rules governing participation in government processes. This is particularly true where these submissions evidence a lack of intent to invest the resources required to provide meaningful information to the decision making process beyond that already being supplied by other entities in the proceeding.17 If the Commission concludes that certain of the Broadly

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17 None of the Broadly Deficient Interventions assert that the submitters have a unique interest that would not be adequately represented by others in these proceedings.
Deficient Interventions provide useful information for the record, such filings should be accepted as comments rather than interventions.18

1. **Defenders of Wildlife Motion to Intervene**

Since the DoW motion was properly filed, we are addressing it here. DoW is a national not-for-profit conservation organization headquartered in Washington, D.C. DoW claims to have more than 22,000 members and supporters residing in Texas and advocates for policies and actions that DoW believes would contribute to the preservation of numerous species of wildlife in Texas.

DoW alleges that construction of LNG facilities in the Brownsville Ship Channel will affect the passage of ocelots and jaguarundis between the Bahia Grande Unit of the Laguna Atascosa National Wildlife Refuge and the Lower Rio Grande Valley National Wildlife Refuge. DoW claims that the proposed facilities in the BSC will have major impacts on habitat availability. In short, DoW argues that “the level of industrialization of the Brownsville Navigation District that would result from the development of three LNG export terminals and associated pipelines is contrary to the public interest because of the extremely high ecological value of the surrounding natural areas.”

This concern about the cumulative impacts of the three proposed projects is the same concern that DoW voiced in its September 3, 2015 “Scoping Comments on Rio Grande LNG, Annova, Texas LNG” letter to FERC. In its earlier filing, DoW requested that the EIS for each project should analyze not only the extent of the individual impacts,

18 The Department of Energy recently made a very similar ruling in LNG-related proceedings in *Pieridae Energy (USA) Ltd.*, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export U.S.-Sourced Natural Gas by Pipeline to Canada for Liquefaction and Re-Export in the Form of Liquefied Natural Gas to Non-Free Trade Agreement Countries, DOE/FE Order No. 3768, FE Docket No. 14-179-LNG (February 5, 2016). There, the DOE rejected 27 procedurally deficient motions to intervene and treated them as comments instead. Id. at 61.
but also the cumulative impacts of the three proposed projects on federally listed and endangered species. The impacts to federally listed and endangered species found within the area of the Project were already thoroughly considered by RG Developers in the development of its proposal for the LNG facility. That analysis can be found in Resource Report 3 filed as part of joint Exhibit F/F-I Environmental Report of the Application. Overall, the detailed analysis conducted as part of the Application demonstrates that the Project will not contribute to cumulative impacts that would be significant with respect to the species of concern.

2. Motions to Intervene by Vecinos Para El Bienestar de la Comunidad Costera, the Sierra Club, and the joint motion of Roberto de los Santos, Beatriz Zurita, and Raul Zurita

The RG Developers question whether the Vecinos Para El Bienestar de la Comunidad Costera (See Submission No. 53) is a proper party to these proceedings. Its submission acknowledges that it is an “unincorporated association” and there is no indication that the group has any cognizable existence. Not a single natural person is identified as a member and the group apparently has no address. The RG Developers have no objection to individuals organizing and acting as a group, but for the purposes of a formal intervention, the intervenor must have some legal existence in order to be able to ascertain whether, in fact, it has any legitimate interest in the proceedings, how it may actually be impacted, and who is preserving rights upon appeal, etc. The RG Developers ask the Commission to reject this motion on the basis of a failure to identify the true party seeking to intervene.

Further, since these motions were filed as motions and protests, the substance of the Vecinos Para El Bienestar de la Comunidad Costera motion and the joint motion of
Roberto de los Santos, Beatriz Zurita, and Raul Zurita are discussed in the “Protests” section below. Since the Sierra Club motion to intervene raises five concerns that mimic those made by other commenters or are similar to the issues raised in the Broadly Deficient Interventions, the responses to the issues raised by Sierra Club can be found in the discussion in the “Comments” section below.

B. Comments

There have been only six documents titled as comments filed since the Application of May 5, 2016. However, to account for the possibility that the Commission will accept the 92 Broadly Deficient Interventions as comments to the proceeding (or otherwise accept such submissions into the record), they are addressed here as well. The primary concerns raised are related to impacts to the following:

- Safety;
- Decreased property value;
- Health;
- Environment;
- Cultural Resources;
- Wildlife;
- Pollution;
- Tourism;
- Lighting;
- Recreation;
- Noise; and

19 A list of the comments filed are attached as Appendix B.
20 See Appendix A Nos. 4, 10, 16-22, 33, 36, 40, 45, 47, 50, 52, 58, 62, 64, 70, 72, 77-78, 81-82, 83-84, and 88-91.
21 See Appendix A Nos. 6, 9-10, 13-14, 16-18, 23-24, 30-31, 39, 46, 55, 57, 62, 70, and 88.
22 See Appendix A Nos. 4-8, 13-17, 25-27, 33, 45-47, 53, 54, 60, 79, 80, 88, and 94.
23 See Appendix A Nos. 6, 18-19, 21, 33-34, 37-38, 40-42, 44-45, 47, 54-55, 59, 61, 64, 68-69, and 72-73.
24 See Appendix A Nos. 21 and 68.
25 See Appendix A Nos. 5, 38, 41-44, 50, 55, 64, and 92-93.
26 See Appendix A Nos. 5-8, 10-12, 15-17, 19-20, 23-26, 30, 33, 36-37, 62, 70-71, 87, 91, and 94.
27 See Appendix A Nos. 9, 18, 20-24, 28-31, 34-35, 39-40, 45, 47, 49-51, 54-55, 73, and 80.
28 See Appendix A Nos. 37 and 50.
29 See Appendix A Nos. 4, 31, 35, 61, 63, 79, and 80.
30 See Appendix A No. 37.
• Shrimping industry.\textsuperscript{31}

The issues raised in response to the Application are similar in nature to those raised during scoping in the Pre-Filing Process, and, with one exception, the RG Developers September 30, 2015 Rio Grande LNG and Rio Bravo Pipeline Project, Responses to Issues Raised in Docket No. PF15-20-000 During the FERC Scoping Period, filed in Docket No. PF15-20-000 30, 2015 (“Scoping Comments Response”), as well as Exhibit F/F-I Environmental Report to the Application, suffice to address the numerous misunderstandings and misstatements appearing in the latest round of comments, as well as the Broadly Deficient Interventions. However, the submittal by the Rio Grande Valley Coalition for Healthy Children contains new factual and scientific misrepresentations about the Project’s likely effects on the health of children in the Rio Grande Valley, so those claims are being addressed here in an attachment.\textsuperscript{32} As a response to the other allegations, the detailed and thorough analyses of the Project’s cumulative impacts can be found in the Resource Reports filed as part of the Application in Joint Exhibit F/F-I Environmental Report.

C. Protests

There were three protests filed in response to the Application. The three protests that were filed were a joint protest by the Sierra Club and DoW, a protest from Vecinos Para El Bienestar de la Comunidad Costera, and a joint protest of Roberto de los Santos, Beatriz Zurita, and Raul Zurita. Each protest is addressed below.

\textsuperscript{31} See Appendix A No. 48.

\textsuperscript{32} The Rio Grande Valley Coalition for Healthy Children raised concerns about the “adverse health impact of the toxic by-products of liquid natural gas purification.” Based upon the claims found in its motion, it appears that the health risks of the Project are not well understood. Therefore, RG Developers has developed a more detailed response addressing the claims set forth by the Rio Grande Valley Coalition for Healthy Children in Appendix C.
1. **Sierra Club and DoW’s Joint Protest**

Sierra Club and DoW filed a joint protest to the Application. They claim that “Rio Grande seeks to site one of the largest proposed LNG export facilities in one of the most sensitive proposed sites, adjacent to multiple wildlife refuges and important migration corridors.” They also claim that the Project will “have extensive harmful direct, indirect, and cumulative impacts.” Sierra Club and DoW contend that the proposed facilities are contrary to the public interest, and the application should therefore be denied.

The Sierra Club and DoW motion here, like Sierra Club’s prior filings in other proceedings, consists of generalized assertions regarding the presumed harmful environmental effects of induced natural gas production and increased emissions that will follow from all LNG exports. Rather than providing arguments supported by facts or evidence specific to the current Application, the majority of Sierra Club and DoW’s filing consists of versions of the same arguments that have been filed repeatedly by Sierra Club in multiple proceedings before the FERC and Department of Energy, Office of Fossil Energy (DOE/FE). All of the arguments previously considered by DOE/FE and FERC have been rejected consistently by those agencies for good reasons that the RG Developers adopt for these purposes and need not be repeated here.\(^3\)

a. Sierra Club and Defenders of Wildlife Are Prematurely Objecting to a Hypothetical Project of Their Own Creation

Sierra Club and DoW also assert that the Application should be rejected on the basis that the RG Developers might, at some indefinite time in the future, propose to expand the Project and such expanded project could have unacceptable environmental consequences. It argues that the increased output will likely increase emissions and the indirect effects associated with sourcing natural gas and with use of LNG once it is exported.

The RG Developers are particularly disappointed by this argument because they have expended considerable resources developing a fulsome application that covers the complete Project when fully built out. Unlike other developers, who, for sound reasons, have made separate applications for one or more tiers of expansion, the RG Developers’ Application includes all of the anticipated stages of project build out, thereby affording the Commission the greatest opportunity to analyze cumulative environmental impacts before any portion of the Project is constructed. Sierra Club and Dow’s hypothetical concerns notwithstanding, there is no room for siting additional LNG trains at the proposed site and no available land for a contiguous expansion.

It is clear from Sierra Club and DoW’s assumption about a possible expansion that it does not understand the Project. The design of the Rio Grande LNG facility is based on an annualised LNG production rate of 4.5 MTPA for each train and a total of 27

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35 The project site is bounded by the Bahia Grande Channel to the west, Highway 48 to the north, the TX LNG project to the east and the Brownsville Ship Channel to the south.
MTPA for six trains. During the course of a year the LNG plant will see variations in production levels due to the following factors:

- Fluctuations in ambient temperatures during the year;
- Variation in feed gas composition; and
- Planned and unplanned maintenance activities.

In conjunction with the factors listed above, allowance for fuel gas consumed within the Terminal and variations in condensate removal (as a result of feed gas composition variation) has also been taken into account with regard to the calculation of the required pipeline capacity to support planned operations.

As a result of all these influences, the LNG produced per train will range between approximately 0.56 and 0.68 bcf/d, which correlates to a Rio Bravo pipeline feed gas supply of between 0.62 and 0.74 bcf/d. Based on analysis of above production level variation factors, a nominal production capacity of 0.6 bcf/d has been determined, which is toward the high end of the range of reasonable possibilities and leaves little room for improvement through debottlenecking refinements.

The emissions submitted for the Project are aligned with the basis described above and reflect operating at average conditions over the year, and hence incorporate the resultant variations in production levels. While daily or hourly emissions rates are subject to small variations driven primarily by feed gas composition, annualized emissions rates are not increased due to the pipeline capacity.

In summary, the delta between the maximum pipeline capacity and the LNG plant capacity is due to the factors described above and allowance for fuel gas usage and condensate removal. Because the capacity of the RB Pipeline’s system is closely matched
to the projected needs of the RG LNG Terminal facility as proposed, the potential for increased output by the Terminal is minimal and such increases would have to be almost entirely from factors that improve the efficiency of the proposed facilities (reducing the amount of natural gas needed to transport or produce the LNG to be produced). Were any such improvements to materialize, they would increase LNG production with no increase in natural gas consumption or emissions, or, at worst, result in a smaller amount of energy consumed and emissions per unit of LNG produced than currently proposed – meaning the Project would be more environmentally friendly and offer greater net public benefits, not less.

In short, contrary to the available data and facts, Sierra Club and DoW wrongly assert that the Commission should consider as part of the consequences of approving the RG Developers’ proposal that the reasonably foreseeable natural gas consumption and emissions from the proposed Project will be materially greater than as presented by the RG Developers in a manner that would tilt the public interest against approval of the Project.

Such an approach would not only be contrary to the facts, it also would be contrary to established Commission practice. The Commission’s *Corpus Christi Order Denying Rehearing*\(^\text{36}\) is instructive in this regard. There, the Commission explained that according to 40 C.F.R. § 1508.7 (2014), a “‘cumulative impact’ is defined as the ‘impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.’”\(^\text{37}\) Next, the Commission went on to note that “[a]n agency is only required to include ‘such

\(^{36}\) See *Corpus Christi Order Denying Rehearing*.

\(^{37}\) *Id.* at 11.
information as appears to be reasonably necessary under the circumstances for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well nigh impossible.”\textsuperscript{38} Then, the Commission continued by stating that “an effect is reasonably foreseeable if it is ‘sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.’”\textsuperscript{39} Finally, the Commission explained its practice is to “consider each LNG export project application on its own merits.”\textsuperscript{40}

This same logic should apply in the Commission’s review of the RG Developers’ Application. It would be “well nigh impossible” to review a pending LNG application while giving consideration to the speculative effects of an expansion project that is not proposed.\textsuperscript{41} Moreover, the uncertainty and complexity would be geometrically expanded in attempting to analyze the Project’s cumulative impacts with the other proposed LNG projects (each of which also could, in theory, be expanded) that are already under consideration. As a practical matter, inclusion of the proposed Annova and Texas LNG export projects, which are also in the proposal stage, already adds a degree of conservatism to the analysis because total production can never exceed whatever amount is ultimately approved by the Commission, while even fully approved projects do not necessarily reach fruition. As the DOE/FE has stated “it is far from certain that all or even most of the proposed LNG and compressed natural gas (CNG) export projects will ever be realized because of the time, difficulty, and expense of commercializing,


\textsuperscript{39} Id. (quoting \textit{City of Shoreacres v. Waterworth}, 420 F.3d 440, 453 (5th Cir. 2005)).

\textsuperscript{40} Id. at 13.

\textsuperscript{41} Analysis of unproposed expansions would requiring resolving a series of intractable issues, such as how much additional liquefaction capacity would be involved, how would the natural gas get to the Terminal, what land would be used, and so on.
financing, and constructing such projects, as well as the uncertainties inherent in the
global market demand for LNG and CNG.” As such it is entirely appropriate for the
Commission’s evaluation here to be limited to the facts before it, as represented in the
Application and not on unfounded speculation about future effects of an unproposed,
undefined and unrealistic expansion of the Project. In the same manner that FERC
deprecated to consider cumulative impacts in the Corpus Christi Order Denying Rehearing,
it should do so now.

b. Sierra Club and DoW’s Objections to the Design of the
Proposed Liquefaction Facility Are Ill Founded

Sierra Club and DoW argue that because the on-site GE Frame 7 gas turbines that
power the liquefaction trains are the primary source of direct air pollution for the Project,
FERC must consider the potential benefits of liquefaction trains powered by electricity.
Sierra Club and DoW, again without scientific justification, contend that the electric
motors would drastically reduce direct air emissions.

Sierra Club and DoW fail to take into account in their analysis that the use of the
electric grid for the electric motors would require the installation of additional
transmission lines and reinforcements. This poses concerns similar to those that FERC
discussed in its Corpus Christi Order Denying Rehearing, in which FERC explained
that using an electric-motor alternative would not be preferable to the proposed gas-
driven units because of the long transmission line that would need to be installed to
supply the electric motors with power and the resulting expansion of a nearby electrical

42 Flint Hills Resources, LP, Opinion and Order Granting Long-Term, Multi-Contract Authorization to
Export Liquefied Natural Gas in ISO Containers and in Bulk Loaded at the Stabilis LNG Eagle Ford
Facility in George West, Texas and Exported by Vessel to Non-Free Trade Agreement Nations,
DOE/FE Order No. 3829, FE Docket No. 15-168-LNG (May 20, 2016) at 22.

43 Corpus Christi Order Denying Rehearing at 19-21.
substation along with other electrical system upgrades. As acknowledged by the Sierra Club and DoW in their protest, there would still be emissions from the electric motors. Considering the use of electric motors would only relocate the source of emissions to the locations where the electricity is generated and that the aboveground transmission lines required to transport the electricity would produce additional impacts to view sheds and avian life, the alternative Sierra Club and DoW is asking for FERC and the Project to consider are likely to result in a less desirable scenario than the one currently proposed. FERC need not consider every possible configuration of an LNG project. Here, RG Developers have considered a reasonable range of alternatives and struck a reasonable balance, electing to forego on-site primary electric power production in favor of the use of third-party supplied power, but utilizing natural gas driven LNG trains for the reasons described in the Application.

c. Sierra Club and DoW’s Concerns Extend beyond the Proper Bounds of this Proceeding

Sierra Club and DoW assert that the Project will result in additional natural gas production and that such additional production will have foreseeable and severe environmental consequences. Additionally, they argue that the RG Developers have failed to consider the whole picture with regard to whether the Project will result in economic benefits.

Rather than describe these impacts in their protest, Sierra Club and DoW vaguely refer to other filings in which “Sierra Club has described these impacts, and the tools that can be used to foresee them, in numerous other FERC dockets.” As the Commission well knows, the Commission has had previous occasion to consider arguments of this type by
Sierra Club and has rejected them. For example, as the Commission found in its Corpus Christi Order Denying Rehearing,

We continue to believe that analysis of the impacts of additional natural gas production as an indirect effect of the Corpus Christi LNG Project is beyond the scope of the review dictated by NEPA. NEPA only requires consideration of an indirect effect if there is a “reasonably close causal relationship between the environmental effect and the alleged cause.” There is not the requisite reasonably close causal relationship between the impacts of future natural gas production and the Corpus Christi LNG Project. The Commission has no jurisdiction over the production and development of domestic natural gas. Rather, production is regulated by state and local governments. Under NEPA, where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant “cause” of the effect.

The Commission is not alone in rejecting the assertion that induced natural gas production must be considered in fulfilling the Commission’s NEPA obligations in taking action on LNG related matters, DOE/FE has also determined that any potential induced gas production is also beyond the scope of “indirect effect” that must be analyzed under NEPA. The Sierra Club and DoW offer no explanation as to why the Commission should reverse itself on this issue.

d. Effects on Implementation of Clean Power Plan and the Electric Sector

Sierra Club and DoW challenge Rio Grande’s assertion that expanding the use of natural gas infrastructure will benefit the environment due to reduced carbon dioxide


Id.

Sabine Pass Liquefaction at 28 (“DOE/FE accepts and adopts the Commission’s determination that induced shale gas production is not a reasonably foreseeable effect for purposes of NEPA analysis, for the reasons given by the Commission.”).
emissions. They argue that the indications, based on available evidence, are that “LNG exports will increase domestic natural gas prices, and that these price increases may cause an increase in coal use in the electric sector despite the Clean Power Plan and regulated federal regulations.”

RG Developers disagree with the Sierra Club and DoW’s position that because of a modest increase to the price of domestic natural gas prices from LNG exports, there will be a resulting increase in coal use in the electric sector. Although the Brookings Institute study stated that “U.S. LNG exports are likely to have a modest upward impact on domestic prices,” the study contradicts the Sierra Club and DoW’s assumption about the subsequent increase in coal use, by concluding that:

Given the lack of environmentally and economically viable alternatives, a moderate increase in gas prices is unlikely to result in a large move away from natural gas, although increased costs will be transferred to customers. Natural gas consumption in the power sector has been considered economic at prices much higher than those resulting from LNG exports in even the highest price-impact projections. Even prior to the shale gas “revolution,” when natural gas prices were high, natural gas demand was increasing in the power sector.

Based upon the analysis by the Brookings Institute, an increase in coal use in the electric sector because of LNG exports, as suggested by Sierra Club and DoW, is unlikely.

e. Effects on Global Greenhouse Gas Emissions

Sierra Club and Defenders of Wildlife (DoW) challenge the findings of the report prepared by the Perryman Group for Resource Report 5 entitled “The Potential Impact of the Proposed Rio Grande Liquefied Natural Gas (LNG) and Rio Bravo Pipeline Facilities

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48 Protest of Sierra Club and DoW at 7.
50 Id. at 33.
on Business Activity in Cameron County, Texas, and the United States.” Sierra Club and DoW argue that contrary to the Perryman Group’s Report that the Project will provide a climate benefit, available evidence indicates that the Projects will impede both the U.S.’s ability to meet its obligations and global efforts to reduce emissions. However, Sierra Club and DoW did not provide the available evidence to contradict the Perryman Group’s Report.

The Project will provide a climate benefit because among fossil fuels, natural gas is the least carbon intensive. Combustion of natural gas emits approximately half as much carbon dioxide (CO₂) as traditional coal and 33 percent less than oil.51 While natural gas still produces GHG emissions, when it displaces more carbon-intensive fuels like coal and oil, it can lower greenhouse gas emissions.

Sierra Club and DoW assert that the U.S. has already committed to significantly reducing greenhouse gas emissions and the cumulative effects (direct and indirect) of the LNG export proposals will hinder the U.S.’s ability to satisfy these obligations. However, Sierra Club and DoW did not provide evidence to support the statement.

Although national and international organizations have identified that increasing greenhouse gas emissions are the primary factor affecting climate change, climate change as a global issue is complex. Sources of these gases include combustion of fossil fuels, agricultural and land use practices as well as the handling of waste. Currently, neither the EPA, FERC, nor TCEQ has a method available to assess the potential impacts of an individual project on climate change. Resource Report 9, filed as part of the Application in Joint Exhibit F/F-I Environmental Report, quantifies emissions of greenhouse gases

from operation and construction of the project from both stationary and mobile sources and direct and indirect, which is consistent with other LNG Terminal’s assessment of climate impacts.

2. Protests of Vecinos Para El Bienestar de la Comunidad Costera and the Joint Protest of Roberto de los Santos, Beatriz Zurita, and Raul Zurita

Vecinos Para El Bienestar de la Comunidad Costera (“VBCC”) and Roberto de los Santos, Beatriz Zurita, and Raul Zurita (“DMH Intervenors”) express concerns about the location, size, and safety of the Project and the environmental and health impacts related to construction and operation of the Project. Both VBCC and DMH Intervenors oppose the Project due to its significant impacts on the members’ health, safety, and quality of life, while DMH Intervenors adds a concern about their livelihoods. Based upon these concerns, VBCC and DMH request that the Application be denied since the Project is contrary to the public interest.

The issues raised in these protests are not materially different than those raised by commenters during the FERC scoping period for this Project. They were all responded to in detail in the Scoping Comments Response. In addition, as part of the Application, RG Developers, conducted thorough analyses and prepared extensive environmental reports to discuss the impacts of the Project. The Resource Reports filed as part of the Application as Joint Exhibit F/F1 address many of the concerns raised by the protestors related to the environmental and health impacts they cite. As discussed above, the Terminal will have relatively low air emissions because the Terminal site will harbor one of the least polluting, and safest types of industrial facilities in the world. There are multiple documents already filed as part of RG Developers’ Application that touch on various issues related to the health, environment, and quality of life. These can be found

As for the safety concerns raised, the LNG industry is tightly regulated when it comes to safety. If approved, the RG Project will be subject to a large number of safety regulations and guidelines and will be inspected by multiple governmental authorities, both during construction and continued operation. As part of the review required for the FERC authorization, the Commission staff must evaluate whether all proposed facilities would operate safely and securely. The design information about the safety of the proposed Project was filed for the FERC’s review in Resource Report 11 – Reliability and Safety and Resource Report 13 – Engineering and Design Material filed as Part of Joint Exhibit F/F1 of the Application.
CONCLUSION

For the reasons described herein, RG Developers respectfully request that the motions to intervene made in Submission Nos. 1-36, 38-40, 43-52, 54-58, and 60-94, and the arguments opposing the Project made in the comments and protests referenced above should be rejected by the Commission.

Respectfully submitted,

/s/ Erik J.A. Swenson
Erik J.A. Swenson
Alisa Chunephisal
Attorneys for
Rio Grande LNG, LLC and
Rio Bravo Pipeline Company, LLC

Dated: June 22, 2016
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terrence M. Garrett</td>
<td>5/6/2016</td>
<td>Typical objections. Objects to all LNG terminals but intervention is in Rio Bravo docket. Only seeks to preserve right to object to TX LNG Project.</td>
</tr>
<tr>
<td>2</td>
<td>Rose M. Ouderkirk</td>
<td>5/10/2016</td>
<td>Includes typical objections voiced during scoping period, including erroneous claims regarding towering flares burning at night.</td>
</tr>
<tr>
<td>3</td>
<td>Sonia Martin</td>
<td>5/16/2016</td>
<td>Same comment as William Beatty</td>
</tr>
<tr>
<td>4</td>
<td>William Beatty</td>
<td>5/16/2016</td>
<td>Negative impacts on property rights, health, safety, recreational rights, and local economy</td>
</tr>
<tr>
<td>5</td>
<td>Rick Teter</td>
<td>5/19/2016</td>
<td>Standard litany of objections - ocelots, toxic gases, dangerous petrochemical industry, etc.</td>
</tr>
<tr>
<td>6</td>
<td>Diane Teter</td>
<td>5/19/2016</td>
<td>General objections based on decreased property values, increased pollution, decreased health and environmental justice. Some inaccurate facts alleged.</td>
</tr>
<tr>
<td>7</td>
<td>Mary E. Volz</td>
<td>5/23/2016</td>
<td>Suffers from dyspnea, will be breathing polluted air and paying higher prices.</td>
</tr>
<tr>
<td>8</td>
<td>Rick Teter</td>
<td>5/23/2016</td>
<td>His second motion to intervene. Same content as his comment of this date.</td>
</tr>
<tr>
<td>9</td>
<td>William E. Kenon, Jr.</td>
<td>5/26/2016</td>
<td>General objections based on decreased property value, decreased tourism, and impacts to his businesses.</td>
</tr>
<tr>
<td>10</td>
<td>Madeleine Sandefur</td>
<td>6/6/2016</td>
<td>General objections based on decreased property value, safety concerns and pollution.</td>
</tr>
<tr>
<td>11</td>
<td>Marianne Poythress</td>
<td>6/6/2016</td>
<td>Two motions based on any facts alleged about the waste management needs, the million gallons of potable water needed, sources of pollution, etc. and how it will affect the area.</td>
</tr>
<tr>
<td>12</td>
<td>Marianne Poythress</td>
<td>6/6/2016</td>
<td>Two motions based on any facts alleged about the waste management needs, the million gallons of potable water needed, sources of pollution, etc. and how it will affect the area.</td>
</tr>
<tr>
<td>No.</td>
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<tr>
<td>13</td>
<td>William C. Best, Jr.</td>
<td>6/6/2016</td>
<td>Two motions based on general objections due to health and decreased property values.</td>
</tr>
<tr>
<td>14</td>
<td>William C. Best, Jr.</td>
<td>6/6/2016</td>
<td>Two motions based on general objections due to health and decreased property values.</td>
</tr>
<tr>
<td>15</td>
<td>Garry Stebbins</td>
<td>6/6/2016</td>
<td>General objections due to health and pollution.</td>
</tr>
<tr>
<td>16</td>
<td>Julie Edelstein</td>
<td>6/6/2016</td>
<td>Two motions based on general objections due to health, safety, pollution, and decreased property values.</td>
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<tr>
<td>17</td>
<td>Julie Edelstein</td>
<td>6/6/2016</td>
<td>Two motions based on general objections due to health, safety, pollution, and decreased property values.</td>
</tr>
<tr>
<td>18</td>
<td>Jaime Sweeden</td>
<td>6/6/2016</td>
<td>General objections based on safety, property value, quality of life, economic impact on tourism and the impact on the environment.</td>
</tr>
<tr>
<td>19</td>
<td>Sara Stephens</td>
<td>6/8/2016</td>
<td>General objections based on pollution, safety, and loss of scenery. She claims that the &quot;LNG people have been very dishonest and manipulative.&quot;</td>
</tr>
<tr>
<td>20</td>
<td>Gerhard Rupp</td>
<td>6/8/2016</td>
<td>General objections based on due to loss of tourism, air and water pollution, increase in channel traffic, and safety.</td>
</tr>
<tr>
<td>21</td>
<td>City of South Padre Island, TX</td>
<td>6/8/2016</td>
<td>Two motions based on general objections due to a loss of tourism, safety and health concerns, adverse impacts on environmental and cultural resources.</td>
</tr>
<tr>
<td>22</td>
<td>Cynthia R. Sturlin</td>
<td>6/9/2016</td>
<td>General objections based on loss of jobs and tourism, safety, inability to continue boating.</td>
</tr>
<tr>
<td>23</td>
<td>Theresa Rudolph</td>
<td>6/9/2016</td>
<td>Two motions based on general objections based on decreased property values, loss of rental income from tourism, and pollution</td>
</tr>
<tr>
<td>24</td>
<td>Theresa Rudolph</td>
<td>6/9/2016</td>
<td>Two motions based on general objections based on decreased property values, loss of rental income from tourism, and pollution</td>
</tr>
<tr>
<td>25</td>
<td>Cathy Laferty</td>
<td>6/9/2016</td>
<td>Two motions based on general objections due to pollution and health concerns.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
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<tr>
<td>26</td>
<td>Cathy Laferty</td>
<td>6/9/2016</td>
<td>Two motions based on general objections due to pollution and health concerns.</td>
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<tr>
<td>28</td>
<td>Sharon L. Satterfield</td>
<td>6/9/2016</td>
<td>Two motions - General objections based on loss of tourism and rental income.</td>
</tr>
<tr>
<td>29</td>
<td>Sharon L. Satterfield</td>
<td>6/9/2016</td>
<td>Two motions - General objections based on loss of tourism and rental income.</td>
</tr>
<tr>
<td>30</td>
<td>James R. Bathurst</td>
<td>6/9/2016</td>
<td>General objections based on pollution, decrease in tourism, lowered property value.</td>
</tr>
<tr>
<td>31</td>
<td>Robert J. Robledo</td>
<td>6/9/2016</td>
<td>General objections based on impacts to housing, tourism and fishing.</td>
</tr>
<tr>
<td>32</td>
<td>Larry M. Hollman</td>
<td>6/9/2016</td>
<td>General objections based on effects to his developments.</td>
</tr>
<tr>
<td>33</td>
<td>Nicole Ekstrom</td>
<td>6/9/2016</td>
<td>General objections based on safety and health concerns, pollution, and destruction of the environment.</td>
</tr>
<tr>
<td>34</td>
<td>Rudy Salinas, Jr.</td>
<td>6/9/2016</td>
<td>General objections based on loss of tourism, loss of jobs, destruction of the environment, and the opinion that supply and demand is fulfilled by the plants already constructed.</td>
</tr>
<tr>
<td>35</td>
<td>Caren Craig</td>
<td>6/9/2016</td>
<td>General objections based on reduced tourism and access to the channel for recreation.</td>
</tr>
<tr>
<td>36</td>
<td>Adam Baker</td>
<td>6/9/2016</td>
<td>General objections based on pollution, safety concerns, and effects to the shrimping business.</td>
</tr>
<tr>
<td>37</td>
<td>Sierra Club</td>
<td>6/9/2016</td>
<td>General objections based on pollution, environmental impacts, noise and light, and ability to use waters near the Project.</td>
</tr>
<tr>
<td>38</td>
<td>Friends of the Wildlife Corridor</td>
<td>6/9/2016</td>
<td>Harm due to the reduction of wetland and loma habitat.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Date</td>
<td>Comments</td>
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</tr>
<tr>
<td>39</td>
<td>Warren Winger</td>
<td>6/9/2016</td>
<td>General objections based on loss of tourism, reduced property values, and safety concerns.</td>
</tr>
<tr>
<td>40</td>
<td>Susan E. Smith</td>
<td>6/9/2016</td>
<td>General objections due to safety, environment, and decreased tourism concerns.</td>
</tr>
<tr>
<td>41</td>
<td>Defenders of Wildlife</td>
<td>6/9/2016</td>
<td>Two motions - Project is contrary to the public interest because of ecological value of the area.</td>
</tr>
<tr>
<td>42</td>
<td>Defenders of Wildlife</td>
<td>6/9/2016</td>
<td>Two motions - Project is contrary to the public interest because of ecological value of the area.</td>
</tr>
<tr>
<td>43</td>
<td>Lower Laguna Madre Foundation</td>
<td>6/9/2016</td>
<td>Concerns about aquatic and wildlife impacts.</td>
</tr>
<tr>
<td>44</td>
<td>Frontera Audubon Society</td>
<td>6/9/2016</td>
<td>Vital interest in seeing the natural areas and the wildlife remain intact.</td>
</tr>
<tr>
<td>45</td>
<td>Edward N. McBride</td>
<td>6/9/2016</td>
<td>General objections due to health, safety, environment, and decreased tourism concerns.</td>
</tr>
<tr>
<td>46</td>
<td>Greta J. McBride</td>
<td>6/9/2016</td>
<td>General objections due to health, decreased property value, and safety concerns.</td>
</tr>
<tr>
<td>47</td>
<td>Long Island Village Owners Association</td>
<td>6/9/2016</td>
<td>General objections due to health, safety, environment, and decreased tourism concerns.</td>
</tr>
<tr>
<td>48</td>
<td>Shrimp Outlet</td>
<td>6/9/2016</td>
<td>The Project will severly impact the shrimping business that they have.</td>
</tr>
<tr>
<td>49</td>
<td>Burnell Marine &amp; Supply</td>
<td>6/9/2016</td>
<td>The Project will severly impact the tourist business that they have.</td>
</tr>
<tr>
<td>50</td>
<td>Charles W. Doughty</td>
<td>6/9/2016</td>
<td>General objections due to safety, the effect of the lights on humans and wildlife, loss of income to families.</td>
</tr>
<tr>
<td>51</td>
<td>Russell D. Petersen</td>
<td>6/9/2016</td>
<td>General objections due to loss of rental income from tourists and impacts to the environment.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
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<td>Comments</td>
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<tr>
<td>52</td>
<td>Shrimp Outlet Farmers Market</td>
<td>6/9/2016</td>
<td>Concerns about the quality of seafood that he sells and safety concerns for his family nearby.</td>
</tr>
<tr>
<td>53</td>
<td>Vecinos Para El Bienestar de la Comunidad Costera</td>
<td>6/9/2016</td>
<td>This is an intervention and a protest. Concerns about the impacts of the Project to VBCC members’ health, standard of living, and economic development.</td>
</tr>
<tr>
<td>54</td>
<td>Patrick Anderson</td>
<td>6/9/2016</td>
<td>General objections due to health concerns, decreased tourism, damage to the environment.</td>
</tr>
<tr>
<td>55</td>
<td>Jean F. Owen</td>
<td>6/9/2016</td>
<td>General objections due to impact on property values, wildlife, and ecotourism.</td>
</tr>
<tr>
<td>56</td>
<td>Missy Bruce</td>
<td>6/9/2016</td>
<td>Quality of life will be severely disrupted.</td>
</tr>
<tr>
<td>57</td>
<td>Rosanna Pantin</td>
<td>6/9/2016</td>
<td>General objections due to decreased real estate value and impact to fishing.</td>
</tr>
<tr>
<td>58</td>
<td>Joe Barber</td>
<td>6/9/2016</td>
<td>General concerns about evacuation and daily life.</td>
</tr>
<tr>
<td>59</td>
<td>Roberto de los Santos, Beatriz Zurita, Raul Zurita</td>
<td>6/9/2016</td>
<td>This is an intervention and a protest. Concerns about the impacts of the Project to their health, safety, and environment.</td>
</tr>
<tr>
<td>60</td>
<td>Renee Crouch</td>
<td>6/9/2016</td>
<td>Concerned about the health and well-being of her family.</td>
</tr>
<tr>
<td>61</td>
<td>Jim Chapman</td>
<td>6/9/2016</td>
<td>General objections due to the use of the areas for recreation. He values the unspoiled landscape and participated in the restoration efforts of the Bahia Grande. The Bahia Grande Coastal corridor would be partially blocked by the Project.</td>
</tr>
<tr>
<td>62</td>
<td>Judith A. Boris</td>
<td>6/9/2016</td>
<td>General objections about property value, air pollution, use of electricity used by LNG plant, waste of water, safety and potential evacuation routes.</td>
</tr>
<tr>
<td>63</td>
<td>Phillip I Parkinson</td>
<td>6/9/2016</td>
<td>General objections that the plant will negatively affect local tourism, quality of life, and restrict access to the BSC.</td>
</tr>
<tr>
<td>64</td>
<td>Patricia G. Grantom</td>
<td>6/9/2016</td>
<td>General objections about safety, evacuation route, wildlife and general environment.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Date</td>
<td>Comments</td>
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</tr>
<tr>
<td>65</td>
<td>Texas Shrimp Association</td>
<td>6/9/2016</td>
<td>Concerned about the changes that will occur to the day to day operations.</td>
</tr>
<tr>
<td>66</td>
<td>Brownsville/Port Isabel Shrimp Association</td>
<td>6/9/2016</td>
<td>Concerned about the changes that will occur to the day to day operations.</td>
</tr>
<tr>
<td>67</td>
<td>Erik L. Swayder</td>
<td>6/9/2016</td>
<td>I own property closed to the pipe line, two hazardus This is the stupidist place to do petro chem. two many conflicts, people around. how many plants are necessary?</td>
</tr>
<tr>
<td>68</td>
<td>City of Port Isabel</td>
<td>6/9/2016</td>
<td>The city reasonably believes that the project will impact these precious cultural and environmental resources, which are of significance to Port Isabel residents.</td>
</tr>
<tr>
<td>69</td>
<td>City of Port Isabel</td>
<td>6/9/2016</td>
<td>The city reasonably believes that the project will impact these precious cultural and environmental resources, which are of significance to Port Isabel residents.</td>
</tr>
<tr>
<td>70</td>
<td>John Young</td>
<td>6/9/2016</td>
<td>General concerns about decreased property value, degrading the human habitat, honesty of the fossil fuel industry, safety concerns, air quality, inadeqacy of DOE and EIA models for determining public interest, health concerns, etc.</td>
</tr>
<tr>
<td>71</td>
<td>Margaret F. Trahan</td>
<td>6/9/2016</td>
<td>Generally concerned about the possible building/pollution/destruction that the building and function of all the LNG facilities could cause South Padre Island and all the surrounding towns.</td>
</tr>
<tr>
<td>72</td>
<td>Cynthia Hinojosa</td>
<td>6/9/2016</td>
<td>Concerned that the pipeline right-of-way will cause erosion and environmental damage, harm drainage systems and water supplies, and create a safety risk.</td>
</tr>
<tr>
<td>73</td>
<td>Joyce Hamilton</td>
<td>6/9/2016</td>
<td>General objections due to decreased tourism and destruction to the ecosystems.</td>
</tr>
<tr>
<td>74</td>
<td>Poul Bouls</td>
<td>6/10/2016</td>
<td>Not an actual motion. Change of address.</td>
</tr>
<tr>
<td>75</td>
<td>Poul Bouls</td>
<td>6/10/2016</td>
<td>Not an actual motion. Change of address.</td>
</tr>
<tr>
<td>76</td>
<td>Poul Bouls</td>
<td>6/10/2016</td>
<td>Not an actual motion. Change of address.</td>
</tr>
<tr>
<td>77</td>
<td>Shrimp Outlet</td>
<td>6/10/2016</td>
<td>General concern about unsafe proximity to work and home.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Date</td>
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</tr>
<tr>
<td>78</td>
<td>Burnell Marine &amp; Supply</td>
<td>6/10/2016</td>
<td>General concern about unsafe proximity to home.</td>
</tr>
<tr>
<td>80</td>
<td>Susan Wilkins Geery</td>
<td>6/10/2016</td>
<td>General objections due to health, habitat loss, decline in tourism, and local benefits.</td>
</tr>
<tr>
<td>81</td>
<td>Brownsville/Port Isabel Shrimp Association</td>
<td>6/10/2016</td>
<td>General concern about unsafe proximity to homes.</td>
</tr>
<tr>
<td>82</td>
<td>Texas Shrimp Association</td>
<td>6/10/2016</td>
<td>General concern about unsafe proximity to homes.</td>
</tr>
<tr>
<td>83</td>
<td>Rosanna Pantin</td>
<td>6/10/2016</td>
<td>General objections about safety and close proximity of the pipeline to people.</td>
</tr>
<tr>
<td>84</td>
<td>Renee Crouch</td>
<td>6/10/2016</td>
<td>Two motions - concerned about the safety and well-being of her family.</td>
</tr>
<tr>
<td>85</td>
<td>Missy Bruce</td>
<td>6/10/2016</td>
<td>General objection about risks from the pipeline.</td>
</tr>
<tr>
<td>86</td>
<td>Shrimp Outlet Farmers Market</td>
<td>6/10/2016</td>
<td>General objection to the Project.</td>
</tr>
<tr>
<td>87</td>
<td>Margaret F. Trahan</td>
<td>6/10/2016</td>
<td>Two motions - Generally concerned about the possible building/pollution/destruction that the building and function of all the LNG facilities could cause South Padre Island and all the surrounding towns.</td>
</tr>
<tr>
<td>88</td>
<td>John Davis</td>
<td>6/10/2016</td>
<td>General concern about health, safety, property values and recreational use of the area.</td>
</tr>
<tr>
<td>89</td>
<td>Maria Galasso</td>
<td>6/10/2016</td>
<td>General objections related to safety and security concerns.</td>
</tr>
<tr>
<td>90</td>
<td>Susan Wilkin Geery</td>
<td>6/10/2016</td>
<td>Two motions - concerned about the safety of pipelines.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Date</td>
<td>Comments</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------</td>
<td>---------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>91</td>
<td>Aimee B Palomar</td>
<td>6/10/2016</td>
<td>General objections due to pollution and safety.</td>
</tr>
<tr>
<td>92</td>
<td>Friends of Laguna Atascosa National Wildlife Refuge</td>
<td>6/10/2016</td>
<td>Concerned about the potential impacts to the Refuge and aligned with the USFWS letters of concern to the FERC. Lots of factual details.</td>
</tr>
<tr>
<td>93</td>
<td>Friends of Laguna Atascosa National Wildlife Refuge</td>
<td>6/10/2016</td>
<td>Concerned about the potential impacts to the Refuge and aligned with the USFWS letters of concern to the FERC. Lots of factual details.</td>
</tr>
<tr>
<td>94</td>
<td>Bradley Willis</td>
<td>6/10/2016</td>
<td>General objections due to health and pollution.</td>
</tr>
</tbody>
</table>
# APPENDIX B - COMMENTS FILED

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Larry G Schroeder</td>
<td>5/24/2016</td>
<td>Concerned about the proximity of the LNG plants to the retirement/vacation community located on Long Island.</td>
</tr>
<tr>
<td>2</td>
<td>Maryann R Schroeder</td>
<td>5/24/2016</td>
<td>Concerned about the proximity of the LNG plants to the retirement/vacation community located on Long Island.</td>
</tr>
<tr>
<td>3</td>
<td>Raymond D. Rhodes</td>
<td>5/31/2016</td>
<td>Concerned about decreased real estate value, endangerment of wildlife and waterfowl on wetlands, and threats to future security of the United States Homeland.</td>
</tr>
<tr>
<td>4</td>
<td>Karen Holleschau</td>
<td>6/1/2016</td>
<td>Strongly objects to any liquid natural gas export plants along the Port of Brownsville or anywhere along the Texas Gulf Coast. Concerned about effects to unspoiled beauty and rare birds that can’t be seen anywhere else.</td>
</tr>
<tr>
<td>5</td>
<td>Judith A. Boris</td>
<td>6/9/2016</td>
<td>Concerns about pollution, property value, electricity used by the plant, and the use of water. She is also concerned about safety and evacuation routes.</td>
</tr>
<tr>
<td>6</td>
<td>M. Bridget Hagarty</td>
<td>6/9/2016</td>
<td>The proposed facility would have a negative effect on the natural resources, access to recreational waters, commercial fishing, property values and quality of life.</td>
</tr>
<tr>
<td>7</td>
<td>Phillip I Parkinson</td>
<td>6/9/2016</td>
<td>The LNG Plant will negatively affect local tourism and quality of life.</td>
</tr>
</tbody>
</table>
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Submitted June 17, 2016

Issue
The Rio Grande Valley Coalition for Healthy Children submitted an intervention to the proposed Rio
Grande LNG Terminal concerning potential air quality issues.

Response

CRITERIA POLLUTANTS AND NAAQS
Rio Grande Valley Coalition for Healthy Children’s motion to intervene discussed several complicated air
quality issues. In order to respond appropriately to each issue a brief overview of the regulatory
framework is required. The Federal Clean Air Act establishes the regulatory framework for the control of
air pollutants in the United States. Section 108 requires the USEPA to set standards (called the National
Ambient Air Quality Standards [NAAQS]) for six common air pollutants called “criteria pollutants”.
Criteria pollutants include:

- nitrogen oxides (NOx)
- carbon monoxide (CO)
- ozone (O3)
- Lead (Pb)
- sulfur oxides (SOx) and
- Particulate matter (both particulate matter with an aerodynamic radius less than 10 microns
  (PM10) and particulate matter with an aerodynamic radius less than 2.5 microns (PM2.5))

The Clean Air Act requires two sets of standards for each criteria pollutant to be set: Primary standards
and secondary standards. Primary standards provide public health protection, including the health of
sensitive populations such as asthmatics, children and the elderly. Secondary pollutants provide public
welfare protection which includes protection against decreased visibility and damage to animals, crops,
vegetation and buildings. When permitting a new industrial facility under New Source Review (NSR) and
Prevention of Significant Deterioration (PSD) regulations the applicant must demonstrate that the facility
will not cause or contribute to an exceedance of the NAAQS, which sets a level playing field for all
industries seeking to construct a facility that will emit criteria pollutants. Several of the air quality issues
raised in the motion to intervene refer to specific health effects, rather than an exceedance of a NAAQS.
Specific health effects are an important issue, however it is not within the applicant’s duty to review
and/or set health based standards. Periodic review of the NAAQS is required by the Clean Air Act. The
EPA’s review of the NAAQS provides the public an opportunity to comment on the assessments, which
would be an appropriate venue to address health effects.

Other regulated air pollutants, which are not criteria air pollutants, include volatile organic compounds
(VOCs), hazardous air pollutants (HAPs), and greenhouse gases (GHGs) among others.

The PSD permitting process requires a Best Available Control Technology (BACT) Analysis and
dispersion modeling for pollutants exceeding the PSD threshold and the Significant Emission Rate (SER).
The BACT process is described in the section “AIR QUALITY MITIGATION” below.
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Dispersion modeling includes detailed engineering data such as pollutant emission rate, stack height, stack temperature, stack exit velocity, and five years of meteorological data. Dispersion modeling is the primary tool used to determine if a new source will cause or contribute to an exceedance of the NAAQS. Using this input data, the model calculates the worst case ground level concentration within a 30 mile (50 kilometer) radius of the Terminal. The modeling conducted thus far has only included the Terminal with Compressor Station 3 emissions and the current baseline or background levels of pollutants. This modeling has shown that the Terminal will not cause or contribute to an exceedance of any NAAQS.

A specific comment in the motion to intervene stated that it is of utmost importance that this permit for a 1000 acre, 8 billion dollar LNG facility not be evaluated in isolation. Cumulative modeling, required under PSD regulations, will model the Terminal and Compressor Station 3 emissions with air emission sources surrounding the Terminal in the modeling domain. Cumulative modeling must demonstrate that the Terminal, current air emission sources, and the background concentrations together will not cause or contribute to an exceedance of the NAAQS. Determination of background levels is discussed in the section below entitled “AIR QUALITY MONITORING.”

ATTAINMENT STATUS

From EPA (2016): “If the air quality in a geographic area meets or is cleaner than the national standard, it is called an attainment area (designated “unclassifiable/attainment”); areas that don't meet the national standard are called nonattainment areas. In some cases, EPA is not able to determine an area's status after evaluating the available information. Those areas are designated "unclassifiable."

Designations are based on air quality data collected at monitors and other air quality information such as modeling. Currently, Cameron County is designated as unclassifiable/attainment for all criteria pollutants.

AIR QUALITY MONITORING

The TCEQ has an established air quality monitoring division. The purpose of this division is to oversee the Texas air quality monitoring program, take samples and analyze the air in Texas and report the results to the public and the EPA. It relies on a network of stationary monitors (that belong to the state, local governments, councils of governments, and private partners), labs that analyze samples, and short-term mobile monitoring of emission sources. The program generates data for:

- determining the causes, nature, behavior, and trends of air pollution;
- forecasting possible high concentrations of ozone and particulate matter;
- determining attainment with EPA air quality standards;
- informing Air Pollutant Watch List decisions; and

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1 The initial costs estimates for commercial development of the first 2 trains to come on line were $8B, however the estimates for the full 6 train facility are in the region of $20B. See Rio Grande LNG, [http://www.riograndelng.com/](http://www.riograndelng.com/) (last visited June 22, 2016).
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- Evaluating impacts of air quality on human health.

Currently air quality monitors in the Brownsville-Harlingen-San Benito Area include:

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Location</th>
<th>Pollutants Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>480610004 Cameron, TX</td>
<td>PM10</td>
</tr>
<tr>
<td>2</td>
<td>480610006 Cameron, TX</td>
<td>CO, O3, SO2, PM2.5, PM10, Pb, HAPs</td>
</tr>
<tr>
<td>3</td>
<td>480612002 Cameron, TX</td>
<td>PM2.5, PM10</td>
</tr>
<tr>
<td>4</td>
<td>482150042 Hidalgo, TX</td>
<td>O3, PM2.5, HAPs</td>
</tr>
<tr>
<td>5</td>
<td>482150043 Hidalgo, TX</td>
<td>O3, PM2.5, PM10, HAPs</td>
</tr>
<tr>
<td>6</td>
<td>484790015 Webb, TX</td>
<td>PM10</td>
</tr>
<tr>
<td>7</td>
<td>484790016 Webb, TX</td>
<td>CO, O3, PM2.5, PM10, Pb, HAPs</td>
</tr>
<tr>
<td>8</td>
<td>484790017 Webb, TX</td>
<td>CO, PM2.5, PM10, HAPs</td>
</tr>
<tr>
<td>9</td>
<td>484790313 Webb, TX</td>
<td>PM2.5</td>
</tr>
<tr>
<td>10</td>
<td>480612004 South Padre, TX</td>
<td>PM2.5</td>
</tr>
<tr>
<td>11</td>
<td>480611023 Harlingen, TX</td>
<td>O3</td>
</tr>
</tbody>
</table>

Source: https://www3.epa.gov/ttn/ca1/cica/sites_bl_e.html; http://www17.tceq.texas.gov/tamis/index.cfm

As part of the PSD permitting process, an applicant must include the background concentrations for each pollutant evaluated. The background concentration represents a baseline condition in which a facility will be operating. Ideally, the background concentrations are measured by an air quality monitoring station as close to the project location as possible. However, that is not always available. The TCEQ has guidance in place in order to determine if a monitor being used to represent the background ambient conditions is appropriate.

Rio Grande LNG followed the 2015 TCEQ Air Quality Modeling Guidance to determine the most representative monitors available. The majority of the background pollutant data are from monitors in Cameron County. For monitors outside of Cameron County the following factors were used to determine the representativeness of the monitor: proximity of the monitor to the project site; how recent the data was measured; the type and amount of emission sources around the monitor compared to the project site; county population; and overall county air emissions.

The Corpus Christi SO2 monitor was determined to be a conservative representation for background concentrations because it is located near a much larger metropolitan area with larger industrial influences (RG Modeling Protocol, Figure 6-1). Table 6-9 from the RG Modeling Protocol shows that Nueces County (Corpus Christi) emits five times more SO2 than Cameron County (Brownsville).

The Lake Jackson monitor was also determined to be a conservative representation because it is 35 miles from Houston, the fourth largest city in the US, and it is located near more industrial sources than the RG Terminal (Rio Grande Modeling Protocol, Table 6-5). “Further, a review of other air permits in Cameron
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County was conducted and determined that precedence has been set to use the Lake Jackson AQS for NO\textsubscript{2} background concentrations.” – RG Modeling Protocol, Section 6.1.1

PARTICULATE MATTER (PM)

The EPA report referenced that monetizes the benefit of PM\textsubscript{2.5} reductions (Technical Support Document Estimating the Benefit per Ton of Reducing PM\textsubscript{2.5} Precursors from 17 Sectors. U.S. EPA Office of Air and Radiation Office of Air Quality Planning and Standards. January 2013) states limitations of the study. Specifically the reference states:

“It is also important to note that the monetized benefit per ton estimates reflect specific geographic patterns of emissions and specific air quality and benefits modeling assumptions. Great care should be taken in applying these estimates to emission reductions occurring in any specific location, as these are all based on national emission reduction assumptions and therefore represent an average benefit per ton over the entire United States. The benefit per ton for emission reductions in specific locations may be very different from the estimates presented here. In addition, estimates do not capture important differences in marginal benefit per ton that may exist due to different combinations of reductions (i.e., all other sectors are held constant) or nonlinearities within a particular pollutant (e.g., non-zero second derivatives with respect to emissions).”

Given the stated limitations of the study, it is inappropriate to apply the monetized impacts of $300,000 to $750,000 per ton of PM\textsubscript{2.5} reduced to a single facility in a specific location.

VOLATILE ORGANIC COMPOUNDS (VOCs)

VOCs are emitted from a variety of sources including motor vehicles, chemical manufacturing facilities, refineries, consumer and commercial products and natural sources (biogenic). While they are regulated because of their role in ozone production (smog), they are not a criteria pollutant, and therefore do not have an associated NAAQS. A paragraph from the coalition’s intervention states, “Cameron County is in attainment for criteria pollutants, including VOCs…” Rio Grande LNG would like to state that VOCs are not a criteria pollutant and therefore do not have a NAAQS. In addition, the permitting process does not require PSD modeling for VOCs, and therefore a background concentration of VOCs was not included in Resource Report 9. The Coalition states, “However, this regulation is not applicable as it is based on VOCs measured as far as 330 miles away in Brazoria County”. This is not accurate since a background concentration of VOCs using existing air quality monitors is not required and was not provided.

Several air quality studies in the Brownsville area were conducted following concerns of human health in the early 90s and have concluded that VOC levels are relatively low or comparable to other studies and areas in Texas (EPA 1994, Ellenson et al. 1997, EPA 1999).

VOCs emissions from combustion of natural gas are estimated as part of the Project air quality assessment. Rio Grande will incorporate good combustion practices to reduce VOC emissions from the gas turbines, heaters, diesel essential engines, and will use the 28 VHP Leak Detection and Repair (LDAR) program to prevent and minimize fugitive leaks of VOCs. In addition, storage tanks and loading operations will route emissions to the thermal oxidizer for control. These control technologies are discussed in the BACT analysis conducted as part of the permitting process. Rio Grande LNG will be
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required to assess VOC emissions from the Terminal as an ozone precursor in the Ozone Ambient Impact Analysis. This analysis will be provided in the formal PSD air permit application to TCEQ and EPA.

The Coalition states, “Concentrations of many VOCs are consistently higher indoors (up to ten times higher) than outdoors.” This is a true statement. Past research has shown that VOCs are typically higher indoors than outdoors and that construction materials and building characteristics, such as the presence of an attached garage or air exchange rate, can influence levels of indoor VOCs (Levin 1989; Otson et al. 1994; Wallace 2001; Wallace et al. 1985). Organic chemicals are also found in commonly used household products such as paints, varnishes, as well as cleaning and disinfecting products which add to the levels of VOCs indoors (Wallace 1991a; 1991b). The EPA’s “Total Exposure Assessment Methodology Study” found that a dozen common organic pollutants were 2 to 5 times higher inside homes than outside, regardless of whether the homes were located in rural or highly industrial areas (EPA 1987a; 1987b). In 1994, the EPA conducted a pilot study in the LRGV, and found that concentrations of VOCs were higher inside the homes despite VOC concentrations being low outdoors. Therefore, it is inappropriate to attribute high VOC levels indoors to industrial emission sources.

GREENHOUSE GASES

Although national and international organizations have identified that increasing greenhouse gas emissions are the primary factor affecting climate change, climate change as a global issue is complex. Sources of these gases include combustion of fossil fuels, agricultural and land use practices as well as the handling of waste. Currently, neither the EPA nor TCEQ has a method available to assess the potential impacts of an individual project on climate change. The emissions Resource Report 9 quantifies emissions of greenhouse gases from operation and construction of the project from both stationary and mobile sources and direct and indirect.

AIR POLLUTION MITIGATION

A detailed analysis of emission mitigation measures was conducted and is included in the TCEQ air permit application. The analysis of emission mitigation measures is called Best Available Control Technology, more commonly referred to as a BACT analysis. The BACT analysis is a well-defined process with federal requirements set forth in section 165(a)(4) of the Clean Air Act, in federal regulations at 40 CFR 52.21(j), and in Texas Administrative Code (TAC) under 30 TAC Chapter 116. The BACT analysis establishes emission limitations based on the maximum degree of control that can be achieved, and is a case-by-case decision that considers energy, environmental, and economic impact.

The BACT analysis for Rio Grande LNG was performed in accordance with EPA guidance, which outlines a “top-down” five-step process to determine the appropriate emission control technologies and associated emission limitations:

- Step 1 – Identification of All Control Technologies;
- Step 2 – Elimination of Technically Infeasible Options;
- Step 3 – Ranking of Remaining Control technologies by Control Effectiveness;
- Step 4 – Evaluation of Most Effective Controls; and
- Step 5 – Selection of BACT.
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The pollutants included in the BACT analysis for Rio Grande LNG include NOx, CO, PM_{10}, PM_{2.5}, VOCs, and GHGs. Emission sources considered in the BACT analysis for Rio Grande LNG include refrigeration turbines, thermal oxidizers, flares, fired heaters, diesel engines, natural gas generators, condensate tanks, condensate loading operations, diesel tanks, and component fugitives.

Concerning the specific reference to use of Selective Catalytic Reduction (SCR) to reduce NOx emissions, SCR was evaluated as a control technology for refrigeration turbines, thermal oxidizers, diesel engines, fired heaters, and natural gas generators.

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Certificate of Service

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list for this proceeding.

Dated at Washington, D.C. this 22nd day of June, 2016.

/s/ Maguette Fame
Maguette Fame
Special Services Manager on behalf of
Rio Grande LNG, LLC and Rio Bravo
Pipeline Company, LLC