



**Attn:**

Secretary Kimberly D. Bose  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington, DC 20426

February 19, 2015

**Filed Electronically**

**RE: Venture Global Calcasieu Pass, LLC; Notice of Intent to Prepare an Environmental Impact Statement for the Planned Calcasieu Pass Project (PF15-2-000)**

Secretary Bose:

The Sabin Center for Climate Change Law (“SCCCL”)<sup>1</sup> submits these comments on the scope of the proposed environmental impact statement (“EIS”) for the Calcasieu Pass Project as announced by the Federal Energy Regulatory Commission (“FERC”, or the “Commission”).<sup>2</sup>

For the purposes of these comments, SCCCL takes no position on the export of liquefied natural gas (“LNG”) or on whether the Calcasieu Pass Project should be approved. Instead, since the scoping process is intended to help agencies identify significant issues for consideration, SCCCL focuses on a critical issue that was not identified in FERC’s Notice of Intent (“NOI”) – the potential impact of climate change on the Calcasieu Pass Project. Specifically, sea level rise, and an associated increase in flooding and storm surges, may pose a significant risk due to the Project site’s coastal location.

**NEPA and Climate Change**

Pursuant to its obligations under the National Environmental Policy Act (“NEPA”), the Commission must consider sea level rise and related coastal processes as reasonably foreseeable significant adverse impacts. NEPA’s implementing regulations provide that agencies must consider reasonably foreseeable indirect and cumulative environmental impacts.<sup>3</sup> The Council on Environmental Quality (“CEQ”) has taken the position – and several courts have held – that these regulations require federal agencies to evaluate the climate change impacts of their actions.<sup>4</sup> The Commission also must consider sea level rise and storm surge as future baseline

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<sup>1</sup> The Sabin Center for Climate Change Law at Columbia Law School develops legal techniques to fight climate change, trains law students and lawyers in their use, and provides the public with up-to-date resources on key topics in climate law and regulation. SCCCL works closely with the scientists at Columbia University’s Earth Institute and with governmental, nongovernmental, and academic organizations. See <http://web.law.columbia.edu/climate-change>. Please contact SCCCL for assistance locating any sources.

<sup>2</sup> 80 F.R. 4558 (January 28, 2015).

<sup>3</sup> See 40 C.F.R. §§ 1508.7 (defining “cumulative impact”), 1508.8 (defining “effects” as including direct and reasonably foreseeable indirect effects), 1508.25(c) (providing that EISs must consider direct, indirect, and cumulative impacts); see also CEQ, *Considering Cumulative Effects under the National Environmental Policy Act* (1997) [hereinafter “Considering Cumulative Effects Under NEPA”], available at [http://energy.gov/sites/prod/files/nepapub/nepa\\_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf](http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf).

<sup>4</sup> Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews [hereinafter “2014 Draft Guidance”], 79 Fed. Reg. 77801

environmental conditions. As CEQ guidelines clarify, agencies must define an appropriate threshold against which to compare projected environmental impacts, and this threshold should incorporate future environmental conditions.<sup>5</sup>

Moreover, federal and state policy supports consideration of climate change adaptation in the proposed EIS. President Obama has issued an executive order regarding adaptation, which directs agencies to prepare for the impacts of climate change by integrating consideration of climate change into agency operations and overall mission objectives.<sup>6</sup> More recently, President Obama signed an executive order directing federal agencies to adopt new flood elevation standards, taking climate change into account, for the siting, design, and construction of federal projects.<sup>7</sup> The Department of Defense (“DOD”) also intends to adapt to the risks of climate change by “integrating climate change considerations into [the DOD’s] plans, operations, and training across the Department....”<sup>8</sup>

At the state level, the Louisiana Legislature passed the state’s “Coastal Master Plan” in 2012, with the objective of reducing economic losses from storm surge based flooding.<sup>9</sup> The Coastal Master Plan acknowledges that sea level rise poses a significant risk to Louisiana’s coastline.<sup>10</sup> Additionally, the Louisiana Coastal Management Program (“LCMP”), developed pursuant to Section 309 of the Coastal Zone Management Act (“CZMA”), includes as one of its main goals adaptation to the effects of potential sea level rise.<sup>11</sup> The LCMP specifically notes that oil and gas infrastructure along the coast is becoming increasingly susceptible to damage due to the high rate of sea level rise and subsidence on the Louisiana coast.<sup>12</sup>

I also note that the Securities and Exchange Commission (“SEC”) has issued guidance regarding publicly traded companies’ obligation to disclose the impacts that climate change may

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(Dec. 24, 2014), *available at* [http://www.whitehouse.gov/sites/default/files/docs/nepa\\_revised\\_draft\\_ghg\\_guidance.pdf](http://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance.pdf); *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1215-1217 (9th Cir. 2008) (finding that “[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct”); *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 548-50 (8th Cir. 2003) (finding that degradation in air quality was a reasonably foreseeable indirect effect of a project that would increase the supply of coal to power plants); *High Country Conservation Advocates v. United States Forest Serv.*, No. 13-CV-01723-RBJ, 2014 WL 2922751, at \*8-11, 13-15 (D. Colo. June 27, 2014) (holding that it was arbitrary and capricious for federal agencies to omit analysis of GHG emissions and related costs in EISs for mining exploration projects).

<sup>5</sup> Considering Cumulative Effects under NEPA, *supra* note 3, at 41; 40 C.F.R. 1502.15 (defining “affected environment”); 2014 Draft Guidance, *supra* note 4, at 21.

<sup>6</sup> Exec. Order No. 13,653, 78 Fed. Reg. 66817 (Nov. 1, 2013).

<sup>7</sup> Exec. Order No. 13,690, 80 Fed. Reg. 6424 (Jan. 30, 2015).

<sup>8</sup> Department of Defense, *Climate Change Adaptation Roadmap* (2014), *available at* <http://www.scribd.com/doc/242845848/Read-DoD-report-2014-Climate-Change-Adaptation-Roadmap>.

<sup>9</sup> Louisiana Coastal Protection and Restoration Authority, *Louisiana’s Comprehensive Master Plan for a Sustainable Coast* [hereinafter “Coastal Master Plan”] (2012), *available at* [http://issuu.com/coastalmasterplan/docs/coastal\\_master\\_plan-v2?e=3722998/2447530](http://issuu.com/coastalmasterplan/docs/coastal_master_plan-v2?e=3722998/2447530).

<sup>10</sup> *See id.* at 14-19, 44-45, 80- 85.

<sup>11</sup> Louisiana Department of Natural Resources, Louisiana Coastal Management Program, Assessment and Strategy 2011-2015, at 22-24, 69, 82, *available at* <http://coastalmanagement.noaa.gov/mystate/docs/la3092011.pdf>

<sup>12</sup> *Id.* at 23.

have on their operations.<sup>13</sup> CEQ has proposed, but not yet finalized, revised guidance that would call for EISs prepared under NEPA to consider future climate impacts on projects.<sup>14</sup> The Draft NEPA Guidance clarifies that climate change adaptation and resilience are important considerations and instructs agencies to identify the affected environment based on available climate change projections for the expected lifespan of the proposed project.<sup>15</sup>

Moreover, FERC recently required consideration of climate change impacts in connection with another proposed LNG export facility in flood-prone coastal Louisiana (the “Mississippi River LNG Project”).<sup>16</sup> After the applicant for the Mississippi River LNG Project submitted draft resource reports to the Commission, FERC directed the applicant to supplement the reports with information regarding potential impacts of sea level rise and storm impacts for the design life of the facility.<sup>17</sup> FERC should direct Venture Global Calcasieu Pass, LLC to research and submit the same information, and the Commission should use this information to consider sea level rise and attendant flood-risks in the Project EIS.

## Sea Level Rise

As oceans absorb heat and as glaciers and ice sheets melt, global sea levels are rising at increasing rates.<sup>18</sup> In the next several decades, storm surges and high tides will combine with sea level rise and, in some locations, land subsidence to increase flooding in many regions, threatening the communities and industries along our coastlines.<sup>19</sup> Many sources provide current and credible data regarding sea level rise and its potential consequences. As relevant examples, SCCCL points the Commission’s attention to:

- Intergovernmental Panel on Climate Change (“IPCC”), Chapter 2.2.3 Ocean, cryosphere and sea level. In *Climate Change 2014 Synthesis Report, Fifth Assessment Report*, at SYR-22 – SYR-23, *available at* [http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR\\_AR5\\_LONGERREPORT\\_Corr2.pdf](http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_LONGERREPORT_Corr2.pdf).<sup>20</sup>

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<sup>13</sup> SEC, *Commission Guidance Regarding Disclosure Related to Climate Change* (2010) (“Significant physical effects of climate change... have the potential to affect a registrant’s operations and results. For example, severe weather can cause catastrophic harm to physical plants and facilities and can disrupt manufacturing and distribution processes.... Registrants whose businesses may be vulnerable to severe weather or climate related events should consider disclosing material risks of, or consequences from, such events in their publically filed disclosure documents.”), *available at* <http://www.sec.gov/rules/interp/2010/33-9106.pdf>.

<sup>14</sup> 2014 Draft Guidance, *supra* note 4.

<sup>15</sup> *Id.* at 21-23.

<sup>16</sup> Louisiana LNG Energy, LLC, Proposed Mississippi River LNG Project (PF14-17-000).

<sup>17</sup> Letter to Louisiana LNG Energy, LLC providing comments on Draft Resource Reports 2 through 9 re the Mississippi River LNG Project under PF14-17 (Nov. 24, 2014).

<sup>18</sup> Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014: Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program, 841 pp. doi:10.7930/J0Z31WJ2 [hereinafter “National Climate Assessment”], at 44.

<sup>19</sup> National Climate Assessment, at 45; Gordon, Kate, 2014: Risky Business: The Economic Risks of Climate Change in the United States. The Risky Business Project [hereinafter “Risky Business”], at 20.

<sup>20</sup> Church, J.A. et al., 2013: Sea Level Change. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

- The National Climate Assessment, at 44-45, 396-417, *available at* <http://nca2014.globalchange.gov>.
- Climate Central, Surging Seas: Sea Level Rise Analysis, *available at* <http://sealevel.climatecentral.org>.
- Risky Business: The Economic Risks of Climate Change in the United States, *available at* [http://riskybusiness.org/uploads/files/RiskyBusiness\\_Report\\_WEB\\_09\\_08\\_14.pdf](http://riskybusiness.org/uploads/files/RiskyBusiness_Report_WEB_09_08_14.pdf)

Using these and other sources, the Commission should assess the projected range of sea level rise and storm surge throughout the life of the Calcasieu Pass Project and identify ways to prepare for climate change-related risks. To avoid underestimating these risks, the Commission should consider basing its analysis on sea level rise at the high end of the projected range. Notably, the 2014 National Climate Assessment indicates that the Southeast United States is “exceptionally vulnerable” to climate change impacts and notes that coastal counties and parishes in Louisiana already face significant losses from land subsidence and sea level rise.<sup>21</sup> Moreover, since the Calcasieu Pass Project will involve sensitive and expensive equipment and bring large ships carrying highly combustible and potentially explosive cargo to the Project site, the Commission should certainly exhibit a low tolerance for risk.

Additionally, to adequately protect the Calcasieu Pass Project from future climate change impacts, the Commission should consider the risks of more frequent and severe flooding. These risks are not fully reflected by static sea level rise data. Increasingly intense storm surges are a foreseeable risk on the coast of Louisiana, where the Calcasieu Pass Project is sited. Particularly relevant is the 2014 National Climate Assessment’s observation that oil and gas infrastructure is likely to become increasingly vulnerable to storm surge as sea level rises and barrier islands deteriorate along the central Gulf Coast.<sup>22</sup>

Finally, the design of the Calcasieu Pass Project should incorporate an additional margin of safety, known as “freeboard,” to account for unanticipated risk factors. The inclusion of freeboard in flood planning is intended to protect against risks that can contribute to flood heights, such as waves and the effect of development on ground water absorption.<sup>23</sup> These risks are separate from and additional to the risks of sea level rise and storm surge, and should be evaluated as such in connection with the Calcasieu Pass Project.

In sum, sea level rise and increased flooding due to climate change pose a foreseeable risk to the Calcasieu Pass Project. However, the Calcasieu Pass Project NOI does not identify climate change or sea level rise as a significant issue for analysis in the proposed EIS. The Commission must consider these impacts to adequately protect the Project from future climate change impacts and to fulfill its obligations under NEPA. FERC has taken steps to consider such

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<sup>21</sup> National Climate Assessment, at 397, 400.

<sup>22</sup> National Climate Assessment, at 401.

<sup>23</sup> American Society of Civil Engineers, Highlights of ASCE 24-05 Flood Resistant Design and Construction (2010), *available at* <http://www.fema.gov/media-library/assets/documents/14983>; FEMA Hurricane Sandy Recovery Advisories RA2: Reducing Flood Effects in Critical Facilities (April 2013) and RA5: Designing For Flood Levels above the BFE After Hurricane Sandy (April 2013), *available at* <http://www.fema.gov/media-library/assets/documents/30966>.

impacts in connection with another proposed LNG export facility on the Louisiana Coast, and it should do the same here.

Thank you for the opportunity to submit comments on the scope of the Calcasieu Pass Project EIS. Please feel free to contact SCCCL with any questions.

Sincerely,

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Enclosures:

FERC's Letter to Louisiana LNG Energy, LLC providing comments on Draft Resource Reports 2 through 9 re the Mississippi River LNG Project under PF14-17 (Nov. 24, 2014).

National Climate Assessment, *Southeast*

2014 Draft Guidance