

## COMMENT 39 – TABLE OF CONTENTS

**Exhibit A (1-13)** - This includes the *Application* and related *Resource Reports* submitted to the Federal Energy Regulatory Commission (FERC) by JCEP, including the following relevant information:

**Page 17 - Exhibit A.1** - This includes the *Application for Authorizations Under Section 3 of the Natural Gas Act - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: eelgrass; dredging activities; wetlands;
- Economic and public benefits including: local communities; the International Port of Coos Bay;
- Information and mitigation re: Natural Hazards (tsunamis; earthquakes; flooding; extreme tides or storm surge);
- Information and planning re: Cultural Resources and Tribal Resources;
- Information and planning re: Environmental Justice;

**Page 208 - Exhibit A.2** - This includes *Resource Report No. 1 - General Project Description - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: fish and fisheries; bird species; marine mammals; eelgrass; dredging activities; water quality; turbidity; noise; wetlands; adjacent areas; recreation; spill prevention, control and countermeasures;
- Information re: alternatives analysis;
- NRI project information re: vessel size and trip frequency; dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots; Roseburg Forest Products;
- Information and mitigation re: Natural Hazards (tsunamis; earthquakes; flooding; extreme tides or storm surge);
- Energy conservation and benefits re: reduced vessel idling;
- Information and planning re: Cultural Resources and Tribal Resources;
- Information re: Environmental Justice;

**Page 400 - Exhibit A.3** - This includes *Resource Report No. 1 - Appendix B.1 - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; bird species; marine mammals; eelgrass; dredging activities; water quality; turbidity; noise; wetlands; adjacent areas;
- Information re: alternatives analysis;
- NRI project information re: dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots;
- Information and mitigation re: Natural Hazards (tsunamis; earthquakes; flooding; extreme tides or storm surge);
- Energy conservation and benefits re: reduced vessel idling;

- Information and planning re: Cultural Resources and Tribal Resources;
- Information re: Environmental Justice;

**Page 755 - Exhibit A.4** - This includes *Resource Report No. 2 - Water Use and Quality - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; bird species; eelgrass; dredging activities; natural resources; water quality; turbidity; wetlands; endangered species; recreation;
- NRI project information re: vessel size and trip frequency; dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency; contaminated sediments;
- Economic and public benefits including: local communities; the International Port of Coos Bay;

**Page 2,378 - Exhibit A.5** - This includes *Resource Report No. 3 - Fish, Wildlife and Vegetation - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; bird species; marine mammals; eelgrass; dredging activities; natural resources; water quality; turbidity; noise; wetlands; adjacent areas; endangered species; recreation;
- NRI project information re: vessel size and trip frequency; dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots;
- Information and mitigation re: Natural Hazards (flooding; extreme tides or storm surge);
- Information and planning re: Cultural Resources and Tribal Resources;
- Information re: Environmental Justice;

**Page 3,170 - Exhibit A.6** - This includes *Resource Report No. 4 - Cultural Resources - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: fish and fisheries; eelgrass; dredging activities; natural resources; water quality; noise; wetlands; recreation;
- Information and planning re: Cultural Resources and Tribal Resources;
- Information re: Environmental Justice;

**Page 3,215 - Exhibit A.7** - This includes *Resource Report No. 5 - Socioeconomics - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; bird species; eelgrass; adjacent areas; recreation;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots;
- Information and planning re: Cultural Resources and Tribal Resources;
- Information re: Environmental Justice;

**Page 3,515 - Exhibit A.8** - This includes *Resource Report No. 6 - Geological Resources - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: dredging activities;
- Information and mitigation re: Natural Hazards (tsunamis; earthquakes; flooding; extreme tides or storm surge);

**Page 3,558 - Exhibit A.9** - This includes *Resource Report No. 7 - Soils - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- NRI project information re: contaminated sediment analysis;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots; Roseburg Forest Products;
- Information and mitigation re: Natural Hazards (tsunamis; flooding; extreme tides or storm surge);

**Page 4,872 - Exhibit A.10** - This includes *Resource Report No. 8 - Land Use, Recreation and Aesthetics - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; recreation;

**Page 4,990 - Exhibit A.11** - This includes *Resource Report No. 9 - Air and Noise Quality - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: noise;

**Page 5,557 - Exhibit A.12** - This includes *Resource Report No. 10 - Alternatives - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: alternatives analysis;

**Page 5,615 - Exhibit A.13** - This includes *Resource Report No. 11 - Reliability and Safety - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: fish and fisheries; recreation; habitat; spill prevention, control and countermeasures;

**Page 5,698 - Exhibit A.14** - This includes *Resource Report No. 13 - Engineering and Design Material - Jordan Cove Energy Project (Sept. 2017)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information and mitigation re: Natural Hazards (tsunamis; earthquakes; flooding; extreme tides or storm surge);

**Page 7,422 - Exhibit B** - This includes *Applicant-Prepared Draft Biological Assessment and Essential Fish Habitat Assessment for the Jordan Cove Energy and Pacific Connector Gas Pipeline Project (Sept. 2018)* which was submitted to FERC and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; bird species; marine mammals; eelgrass; dredging activities; turbidity; noise; wetlands; endangered species; recreation; habitat;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots; Roseburg Forest Products;
- Information and mitigation re: Natural Hazards (tsunamis; flooding);

**Page 8,507 - Exhibit C** - This includes the *Jordan Cove Energy Project and Pacific Connector Gas Pipeline Project - Compensatory Wetland Mitigation Plan (Nov. 2018)* which was submitted to FERC for the JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: fish and fisheries; bird species; marine mammals; eelgrass; dredging activities; natural resources; habitat;

**Page 8,778 - Exhibit D** - This includes the *404 Joint Permit Application (PART 1) - U.S. Army Corps of Engineers Portland District - Oregon Department of State Lands - Jordan Cove Energy Project (Oct. 2017)* which addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; eelgrass; dredging activities; water quality; wetlands; recreation; habitat;
- Information re: alternatives analysis;
- NRI project information re: vessel size and trip frequency; dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: local communities; the International Port of Coos Bay; Bar Pilots;
- Information and planning re: Cultural Resources and Tribal Resources;

**Page 12,403 - Exhibit E** - This includes *JCEP-PCGP Section 404/10 Response to USACE PSET Data Request (Jul. 2018)* which was submitted to the United States Army Corps of Engineers and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: fish and fisheries; habitat;
- NRI project information re: dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: local communities; the International Port of Coos Bay;

**Page 12,613 - Exhibit F** - This includes *Removal-Fill Permit Application (Nov. 2018)* which was submitted to FERC for the JCEP/Pacific Gas Connector Pipeline and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: crabs/crabbing; clamming/shellfish; fish and fisheries; eelgrass; dredging activities; wetlands; turbidity; adjacent areas; recreation; habitat; spill prevention control and countermeasures;
- Information re: alternatives analysis;
- NRI project information re: vessel size and trip frequency; dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: local communities; the International Port of Coos Bay;
- Information and mitigation re: Natural Hazards (extreme tides or storm surge);

**Page 14,018 - Exhibits G (1 through 3)** - This includes three reports prepared by EcoNorthwest titled:  
**Exhibit G.1** - *Jordan Cove Energy Project and Pacific Connector Gas Pipeline: An Economic Impact Analysis for Construction Economic Analysis from Construction* (Jun. 2017);  
**Exhibit G.2** - *Jordan Cove Energy Project and Pacific Connector Gas Pipeline: An Economic Impact Analysis for Operations Economic Analysis from Operations* (Jun. 2017);  
**Exhibit G.3** - *Jordan Cove Energy Project and Pacific Connector Gas Pipeline: Potential Economic Effects on Tourism and Recreation* (Jun. 2017); These reports address the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: potential cumulative impacts and mitigation;
- Information, potential impacts and mitigation re: recreation;
- Economic and public benefits including: local communities; the International Port of Coos Bay;

**Page 14,102 - Exhibit H** - This includes *Turbidity Analysis Memo* (Nov. 2017) which was submitted to FERC for JCEP and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information, potential impacts and mitigation re: eelgrass; dredging activities; water quality; turbidity; adjacent areas;
- Information re: alternatives analysis;
- NRI project information re: dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;

**Page 14,140 - Exhibit I** - This includes *The Vertical Distribution of Infauna: A Comparison of Dredged and Undredged Areas in Coos Bay, Oregon* (Jefferts, 1977) which addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*:

- Information re: eelgrass; habitat;

**Page 14,286 - Exhibit J** - This includes *Technical Memorandum - Water Quality Considerations – Implications for Clean Water Act Sections 401 and 404 Permitting* (Feb. 2018) which was submitted to the Oregon Department of Environmental Quality, with attachments (included), and addresses the following issues:

- Information, potential impacts and mitigation re: fish and fisheries; eelgrass; dredging activities; water quality; turbidity; wetlands; adjacent areas; endangered species; habitat; spill prevention, control and countermeasures;
- NRI project information re: dredging methods; dredging locations; dredge spoil locations; dredge material volumes; dredging frequency;
- Economic and public benefits including: the International Port of Coos Bay; Bar Pilots;

**Page 14,780 - Exhibit K** - This includes *The Impact of Dredging Works in Coastal Waters: A Review of the Sensitivity to Disturbance and Subsequent Recovery of Biological Resources in the Sea Bed* (Newell, et al., 1998) which was referenced in JCEP's 401 submittal to the Oregon Department of Environmental Quality and addresses the following issues raised with regard to the *City of Coos Bay NRI Applications*: Information, potential impacts and mitigation re: crabs/crabbing; shellfish; fish and fisheries; eelgrass; dredging activities; water quality; turbidity; adjacent areas; recreation; endangered species; habitat;

**Page 14,831 - Exhibit L** - This includes *Technical Memorandum, Crustacean and Shellfish Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements* with regard to the *Coos County NRI Applications*;

**Page 14,837 - Exhibit M** - This includes *Technical Memorandum, Fish (e.g., Salmon, Sturgeon, Herring, Candlefish) Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements; Coos County File Nos. AM-18-011/RZ-18-007/HBCU-18-003* with regard to the *Coos County NRI Applications*;



**Page 14,843 - Exhibit N** - This includes *Technical Memorandum, Eelgrass Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ-18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,851 - Exhibit O** - This includes *Technical Memorandum, Recreation Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ-18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,860 - Exhibit P** - This includes *Technical Memorandum, Marine Mammals Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ-18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,869 - Exhibit Q** - This includes *Technical Memorandum, Birds (e.g., Snowy Plover, Blue Heron, Marbled Murrelet, Diving Waterfowl) Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ- 18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,873 - Exhibit R** - This includes *Technical Memorandum, Natural Hazards (Tsunami, Earthquake, Flooding, Storm Surge) Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ- 18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,875 - Exhibit S** - This includes *Technical Memorandum, Dredging Locations, Methods, Equipment, Frequency, Volumes, Dredge Spoil Deposition, Potential Impacts and Mitigation: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ- 18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,881 - Exhibit T** - This includes *Technical Memorandum, LNG Carrier Transit Energy Conservation with NRI's in Place: Navigation Reliability Improvements*; Coos County File Nos. AM-18-011/RZ-18-007/HBCU-18-003 with regard to the Coos County NRI Applications;

**Page 14,883 - Exhibit U** - This includes *Jordan Cove Energy Project L.P., Draft Resource Report Supplement, Navigation Reliability Improvements, Jordan Cove Energy Project (July 2017)*;

**Page 14,909 - Exhibit V** - This includes *Attachment G: 401 Water Quality Certification (October 2017)*, which was submitted to DEQ for the JCEP;

**Page 14,911 - Exhibit W** - This includes *Environmental Assessment - Coos Bay Maintenance Dredging (June 2015)* which was prepared for the U.S. Army Corps of Engineers;

**Page 15,042 - Exhibit X** - This includes *Technical Memorandum, Hydrodynamic Studies – Hydrodynamic Analysis - Jordan Cove Energy Project (Sept. 2018)* which was submitted to FERC for the JCEP;

**Page 15,086 - Exhibit Y** - This includes *Technical Memorandum, Hydrodynamic Studies – Sediment Transport Analysis - Jordan Cove Energy Project (Sept. 2018)* which was submitted to FERC for the JCEP;

**Page 15,122 - Exhibit Z** - This includes *Draft Environmental Impact Statement for the Jordan Cove Energy Project, Docket Nos. CP17-494-000 and CP17-495-000 (March 2019) (without attachments)* prepared by the Federal Energy Regulatory Commission;

**Page 16,264 - Exhibit AA** - This includes *2018 Eelgrass and Bathymetry Surveys Coos Bay, Oregon (Nov. 2018)* which was submitted to FERC for the JCEP;

**Page 16,309 - Exhibit BB** - This includes *Dredging Pollution Control Plan (Navigation Reliability Improvements, Kentuck, APCO) (April 2019)* which was submitted to FERC for the JCEP;

**Page 16,354 - Exhibit CC (1 through 9)** - This includes studies and reports referenced in Exhibits (hereto) and in the public record for the *City of Coos Bay NRI Applications* including the following:

**Exhibit CC.1** - Gaumer, T.F., G.P. Robart, and A. Geiger. 1978. Oregon bay clam distribution, abundance, planting sites and effects of harvest. Annual Report, October 1, 1977 to September 30, 1978. ODFW;

**Exhibit CC.2** - Thom. R.M., A.B. Borde, S. Rumrill, D. L. Woodruff, G. D. Williams, J.A. Southard, S.L. Sargeant. 2003. Factors influencing spatial and annual variability in eelgrass (*Zostera marina* L.) meadows in Willapa Bay, Washington, and Coos Bay, Oregon, estuaries. *Estuaries and Coasts*, Vol 26:4, pp 1117-1129;

**Exhibit CC.3** - Chang, B.D. and C.D. Levings, (1978). Effects of burial on the heart cockle *Clinocardium nuttallii* and the Dungeness crab *Cancer magister*. *Estuarine and Coastal Marine Science*, Volume 7, Issue 4, October 1978, Pages 409-412;

**Exhibit CC.4** - ODFW, Summary of Information Regarding Oregon's Red Abalone Recreational Fishery. ODFW, Charleston Field Office, Charleston, OR, 2018;

**Exhibit CC.5** - Wilber, D.H. and D.G. Clarke. 2007. Defining and assessing benthic recovery following dredging and dredged material disposal. *Proceedings XXVII World Dredging Congress 2007*;

**Exhibit CC.6** - McCabe, G.T., S.A. Hinton, (1998). Benthic invertebrates and sediment characteristics in and adjacent to a proposed channel widening area (River Mile 31-34), Columbia River estuary;

**Exhibit CC.7** - Miller, B.A., McRae, E., (1978). Herring Spawn Survey Coos Bay, Oregon, Winter 1997-98. ODFW;

**Exhibit CC.8** - Coos County Shoreland Values Map, Coos Bay Estuary Management Plan (Rev. 1986);

**Exhibit CC.9 (a) through (c)** - *Reference List* of issues addressed in Exhibits previously submitted into the public record by JCEP for the *Coos County NRI Applications*:

-CC.9(a) - *Cultural Resources & Environmental Justice*;

-CC.9(b) - *Public/Economic Benefits*;

-CC.9(c) - *Cumulative Impact Analysis*;

**Page 16,549 - Exhibit DD** - This includes *Application for Incidental Harassment Authorization for the Taking of Marine Mammals Under Section 101 (a)(5)(A) of the Marine Mammal Protection Act by the Jordan Cove Energy Project (April 2019)* which was submitted to FERC for the JCEP;

**Page 16,789 - Exhibit EE** - This includes *Technical Memorandum, Crustacean and Shellfish Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements* with regard to the *City of Coos Bay NRI Applications*;

**Page 16,796 - Exhibit FF** - This includes *Technical Memorandum, Fish (e.g., Salmon, Sturgeon, Herring, Candlefish) Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,803 - Exhibit GG** - This includes *Technical Memorandum, Eelgrass Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,812 - Exhibit HH** - This includes *Technical Memorandum, Recreation Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,821 - Exhibit II** - This includes *Technical Memorandum, Marine Mammals Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,830 - Exhibit JJ** - This includes *Technical Memorandum, Birds (e.g., Snowy Plover, Blue Heron, Marbled Murrelet, Diving Waterfowl) Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,834 - Exhibit KK** - This includes *Technical Memorandum, Natural Hazards (Tsunami, Earthquake, Flooding, Storm Surge) Baseline Information, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,837 - Exhibit LL** - This includes *Technical Memorandum, Dredging Locations, Methods, Equipment, Frequency, Volumes, Dredge Spoil Deposition, Potential Impacts and Mitigation: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*;

**Page 16,843 - Exhibit MM** - This includes *Technical Memorandum, LNG Carrier Transit Energy Conservation with NRI's in Place: Navigation Reliability Improvements*; with regard to the *City of Coos Bay NRI Applications*.

**END**