FERC Project No. 2009-018 Virginia Electric and Power Company, dba Dominion Virginia Power/Dominion North Carolina Power

License Article 401. *Commission Approval and Reporting* (1) *Revised* Plans and Design Drawing for Commission Approval

¹ of the monitoring provisions
² with the DFRTAC concerning results of the monitoring,
³ the results, agency comments, and licensee's response to agency comments

with the Commission

Settlement Agreement Article & Section No.	Plan or Facility	Implementation ¹	Consultation ²	<u>Filing³</u>	Methodology		
FS2, 3.1-3.3, 3.5 & 3.7	American Eel Distribution Study	Below dam studies: Q1- Q4 2005 - 2008 @ RR; Q1-Q4 2009 - 2013 @ Gaston. Above dam studies: Q3-Q4 2008, 2011, 2014 (at least), 2017, 2020, 2023 (at most) for RR; Q3-Q4 2013 (at earliest), 2016, 2019 (at least), 2022, 2025, 2028 (at most) for Gaston	Below dam studies: Q1 2005 - Q4 2009 for RR; Q1 2009 - Q4 2013 for Gaston. Above dam studies: 2008, 2011, 2014 (at least), 2017, 2020, 2023 (at most) for RR; 2013 (at earliest), 2016, 2019 (at least), 2022, 2025, 2028 (at most) for Gaston	Below dam studies: May 31, 2006; May 31, 2007; May 31, 2008; May 31, 2009 for RR; May 31, 2010; May 31, 2011; May 31, 2012; May 31, 2013 for Gaston <i>Above dam</i> <i>studies</i> : May 31, 2009; May 31, 2012; May 31, 2009; May 31, 2012; May 31, 2015 (at least); May 31, 2018; May 31, 2021; May 31, 2024 (at most) for RR; May 31, 2014 (at earliest); May 31, 2017; May 31, 2020 (at least); May 31, 2023; May 31, 2026; May 31, 2029 (at most) for Gaston	See Attachment 1A for below RR dam study. Others to be developed in consultation with DFRTAC.		
FS2, 3.4 & 3.6	Upstream Eel Facility Design	2008 (or earlier) for RR; 2012 for Gaston	Q3 2008 (or earlier) for RR; Q3 2012 for Gaston	October 31, 2008 (or earlier) for RR; October 31, 2012 for Gaston	To be developed in consultation with DFRTAC.		
FS2, 3.4 & 3.7	Upstream Eel Passage Effectiveness Study	2009 (or earlier) - 2012 (or earlier) for RR (and possibly 2010, 2011, 2015, 2016, 2020, 2021); 2013 (at earliest) - 2016 (or earlier) for Gaston	Q4 2009 - 2012 (or earlier) for RR (and possibly 2010, 2011, 2015, 2016, 2020, 2021); Q4 2013 (at earliest) - 2016 (or earlier) for Gaston	March 31, 2010; March 31, 2011; March 31, 2012; March 31, 2013 for RR (and possibly March 31 of 2011, 2012, 2016, 2017, 2021, 2022); March 31, 2014; March 31, 2015; March 31, 2016; March 31, 2017 for Gaston	To be developed in consultation with DFRTAC.		

Virginia Electric and Power Company, dba Dominion Virginia Power/Dominion North Carolina Power License Article 401. <i>Commission Approval and Reporting</i> (1) <i>Revised</i> Plans and Design Drawing for Commission Approval			¹ of the monitoring provisions ² with the DFRTAC concerning results of the monitoring, ³ the results, agency comments, and licensee's response to agency comments with the Commission			
			Schedule			
Settlement Agreement <u>Article & Section No.</u> FS2, 3.8	<u>Plan or Facility</u> Downstream Eel Passage	Implementation ¹ 2013	Consultation ² 2013	<u>Filing³</u> March 31, 2014	Methodology Literature Review and	
	Evaluation Study				evaluation of current Best Available Technology (including costs and determination of downstream passage efficiency criteria).	
FS2, 3.9 & 3.10	Downstream Eel Passage Facility Design	2015 for RR; 2018 for Gaston	2015 for RR; 2018 for Gaston	March 31, 2016 for RR; March 31, 2019 for Gaston	To be developed in consultation with DFRTAC.	
FS2, 4.1.1.6 & 4.1.2.1	Initial American Shad Trap & Transport Facility	2006 (plan to be developed in 2005) to continue until more permanent facilities required	Q3 2006 and ensuing years as needed.	October 31, 2006 and ensuing years as needed.	Initial efforts to explore use of electrofishing and fishwheel to collect fish, beginning in 2005.	
FS2, 4.1.1.7 & 4.1.2.2	Downstream Shad Passage & Turbine Mortality Study for Post-Spawned Adults & Out- Migrating Juveniles	2005 for literature review. 2006 for further study (if needed)	Q4 2005 for literature review. Q4 2006 for further study (if needed).	March 31, 2006 for literature review. March 31, 2007 for further study (if needed).	Literature review of passage studies at similar hydro stations to determine if mortality at RR and Gaston expected to exceed 7% for juveniles and 15% for post-spawned adults. Further studies to be developed in consultation with DFRTAC.	
FS2, 4.1.2.1 & 4.1.3	Adult Shad Telemetry Study	2007 - 2009 (or earlier)	2005 - 2010 (or earlier)	May 31, 2010	To be developed in consultation with DFRTAC	

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Article & Section No.	<u>Plan or Facility</u>	Implementation ¹	Consultation ²	<u>Filing³</u>	<u>Methodology</u>
FS2, 4.1.4, 4.2.3 & 4.3	Trap/Sort/Transport Facility for Shad at Roanoke Rapids Dam (including designs, construction, engineering testing, schedule for operation, and effectiveness testing)	2007 (at earliest) for beginning design. Constructed and operational by 2009 (at earliest).	2007 (at earliest) for design, and as needed beyond 2007.	May 31, 2008 (at earliest) for designs, construction, engineering testing, schedule for operation, and effectiveness testing. Comment from DFRTAC: It may take more than two years to design the trap/sort/transport facility, have the FERC review completed, and construct the facility.	To be developed in consultation with DFRTAC
FS2, 4.3.12 & 4.3.13	Downstream Passage Measures for Juvenile and Post-Spawned Adult Shad	Need to be determined by results of Turbine Mortality Study, and other studies (if required). Time to be determined based on adult and juvenile movement through reservoirs, and a population level approximating 20K adults in two years.	As needed.	To be determined in consultation with the Commission.	To be developed in consultation with DFRTAC, if needed.