

APPENDIX A

Supporting Spreadsheets  
for

Information Collection Request: Cooling Water Intake  
Structures Existing Facility (Proposed Rule)

March 2011

Formal OMB Review Draft--Do Not Quote, Cite, or Distribute

**Exhibit A.1  
Facility Cost and Burden Estimates for NPDES Permit Application Activities**

**Exhibit A.1a  
Start-up Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
																Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate								B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				\$98	\$41	\$40	\$122	\$70	\$77	\$42	\$19								
Read and Understand Rule	1266	3	3	1272	12	12	0	0	0	0	0	1	25	\$1,686	\$0	\$0			31,800	\$2,144,846
Option Selection/Facility Classification	1266	3	3	1272	8	0	0	0	0	0	0	0	8	\$784	\$0	\$0			10,176	\$997,248
<b>Totals</b>	<b>1266</b>	<b>3</b>	<b>3</b>	<b>1272</b>	<b>20</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>33</b>	<b>\$2,470</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>	<b>\$2,570</b>	<b>41,976</b>	<b>\$3,269,294</b>

**Exhibit A.1b  
Permit Application Activities for power plants with DIR≥50 MG**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
																Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate								B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				\$98	\$41	\$40	\$122	\$70	\$77	\$42	\$19								
Source water physical data	554	0	0	554	1	4	0	0	0	0	0	1	6	\$281	\$0	\$0			3,324	\$155,674
Cooling water intake structure data	554	0	0	554	1	4	0	0	0	0	0	1	6	\$281	\$0	\$0			3,324	\$155,674
Source water baseline biological characterization	554	0	0	554	1	4	0	0	0	0	0	1	6	\$281	\$0	\$0			3,324	\$155,674
Cooling water system data and recordkeeping	554	0	0	554	1	4	0	0	0	0	0	1	6	\$281	\$0	\$0			3,324	\$155,674
Proposed IM sampling plan	554	0	0	554	40	60	8	8	0	0	0	4	120	\$7,744	\$0	\$0			66,480	\$4,290,398
Proposed IM reduction plan results	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0			-	\$0
Documentation of performance studies	554	0	0	554	20	40	0	0	0	0	0	2	62	\$3,635	\$0	\$0			34,348	\$2,013,679
Documentation of operational status	554	0	0	554	10	20	0	0	0	0	0	1	31	\$1,817	\$0	\$0			17,174	\$1,006,840
Documentation of velocity 125.94(b)(2)(i-ii) - can document	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0			-	\$0
Documentation of velocity 125.94(b)(2)(i-ii) - cannot document, proposed monitoring plan	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0			-	\$0
Documentation of technology to minimize the impingement of shellfish	554	0	0	554	8	16	8	0	16	0	0	2	50	\$2,907	\$0	\$0			27,700	\$1,610,367
Recordkeeping	554	0	0	554	2	5	2	0	0	0	0	2	11	\$519	\$0	\$0			6,094	\$287,360
<b>Totals</b>	<b>554</b>	<b>0</b>	<b>0</b>	<b>554</b>	<b>298</b>	<b>17,746</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$18,246</b>	<b>165,092</b>	<b>\$10,108,339</b>								

**Exhibit A.1c  
Permit Application Activities for power plants with DIR≥50 MGD w/ AIF>125 MGD**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
																Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate								B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				\$98	\$41	\$40	\$122	\$70	\$77	\$42	\$19								
Entrainment characterization study: (i) EM plan with peer reviewers identified	354	0	0	354	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0			84,960	\$5,483,035
Entrainment characterization study: (ii) EM plan w/ peer review completed and begin implementation	354	0	0	354	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0			84,960	\$5,483,035
Entrainment characterization study: (iii) completed study	0	354	354	708	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0			169,920	\$10,966,070
Comprehensive technical feasibility and cost evaluation study	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0			-	\$0
Benefits valuation study	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0			-	\$0
Non-water quality and other environmental impacts study	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0			-	\$0
Recordkeeping	354	354	354	1062	2	5	2	0	0	0	0	2	11	\$519	\$0	\$0			11,682	\$550,859
<b>Totals</b>	<b>354</b>	<b>354</b>	<b>354</b>	<b>1062</b>	<b>331</b>	<b>\$21,170</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$21,670</b>	<b>351,522</b>	<b>\$23,014,000</b>								

**Exhibit A.1d**

**Permit Application Activities for Other Existing Facilities with DIF > 2 MGD**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*				
	Year 1	Year 2	Year 3	Total	\$98	\$41	\$40	\$122	\$70	\$77	\$42		\$19							
	Level of Effort (hrs)																			
Source water physical data	0	0	709	709	2	16	40	0	0	0	0	0	58	\$2,438	\$0	\$0		41,122	\$1,728,826	
Cooling water intake structure data	0	0	709	709	2	5	8	0	0	0	0	0	15	\$718	\$0	\$0		10,635	\$509,133	
Source water baseline biological characterization	0	0	709	709	72	140	20	0	0	0	0	20	252	\$13,964	\$0	\$0		178,668	\$9,900,476	
Cooling water system data and recordkeeping	0	0	709	709	2	5	8	0	0	0	0	0	15	\$718	\$0	\$0		10,635	\$509,133	
Proposed IM sampling plan	0	0	709	709	40	60	8	8	0	0	0	4	120	\$7,744	\$0	\$0		85,080	\$5,490,780	
Documentation of velocity 125.94(b)(2)(i-ii)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
Documentation of technology to minimize the impingement of shellfish	0	0	709	709	8	16	8	0	16	0	0	2	50	\$2,907	\$0	\$0		35,450	\$2,060,921	
Documentation of performance studies	0	0	709	709	20	40	0	0	0	0	0	2	62	\$3,635	\$0	\$0		43,958	\$2,577,073	
Documentation of operational status	0	0	709	709	10	20	0	0	0	0	0	1	31	\$1,817	\$0	\$0		21,979	\$1,288,537	
Proposed IM reduction plan results	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
Recordkeeping	0	0	709	709	2	5	2	0	0	0	0	2	11	\$519	\$0	\$0		7,799	\$367,758	
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>709</b>	<b>709</b>									<b>614</b>	<b>\$34,461</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$34,961</b>	<b>435,326</b>	<b>\$24,787,136</b>

**Exhibit A.1e**

**Permit Application Activities for Other Existing Facilities with DIF > 2 MGD w/ AIF>125 MGD**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*				
	Year 1	Year 2	Year 3	Total	\$98	\$41	\$40	\$122	\$70	\$77	\$42		\$19							
	Level of Effort (hrs)																			
Entrainment characterization study: (i) EM plan with peer reviewers identified	0	0	26	26	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0		6,240	\$402,709	
Entrainment characterization study: EM plan w/ peer review completed and begin implementation	0	0	0	0	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0		-	\$0	
Entrainment characterization study: (iii) completed study	0	0	0	0	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0		-	\$0	
Comprehensive technical feasibility and cost evaluation study	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
Benefits valuation study	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
Non-water quality and other environmental impacts study	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
Recordkeeping	0	0	26	26	2	5	2	0	0	0	0	2	11	\$519	\$0	\$0		286	\$13,486	
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>26</b>									<b>251</b>	<b>\$16,008</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$16,508</b>	<b>6,526</b>	<b>\$429,195</b>

**Exhibit A.1f**

**Permit Application Activities for New Units**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*				
	Year 1	Year 2	Year 3	Total	\$98	\$41	\$40	\$122	\$70	\$77	\$42		\$19							
	Level of Effort (hrs)																			
Cooling water intake structure data	3	3	3	9	2	5	8	0	0	0	0	0	15	\$718	\$0	\$0		135	\$6,463	
Cooling water system data and recordkeeping	3	3	3	9	2	5	8	0	0	0	0	0	15	\$718	\$0	\$0		135	\$6,463	
Proposed IM monitoring plan (IM)	3	3	3	9	40	60	8	8	0	0	0	4	120	\$7,744	\$0	\$0		1,080	\$69,700	
Flow reduction information (EM)	3	3	3	9	80	120	16	16	0	0	0	8	240	\$15,489	\$0	\$0		2,160	\$139,399	
If IM demonstration instead of IM monitoring, need to submit velocity information	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
If EM technology instead of velocity demonstration, need to submit CDS	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0	
Recordkeeping	3	3	3	9	2	5	2	0	0	0	0	2	11	\$519	\$0	\$0		99	\$4,668	
<b>Totals</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>9</b>									<b>401</b>	<b>\$25,188</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500</b>	<b>\$25,688</b>	<b>3,609</b>	<b>\$231,193</b>

**Total Burden and Costs for All NPDES Application Activities**

																		Total Burden (hrs.)	Total Initial Cost
<b>Totals</b>																		<b>1,004,051</b>	<b>\$61,839,158</b>

\* The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

**Exhibit A.2  
Facility Cost and Burden Estimates for Annual Activities**

**Exhibit A.2a  
Compliance Monitoring**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total for All Facilities in the ICR Approval Period	
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							Burden (hrs)	Labor Cost	O & M Costs		Total Costs**	Burden (hrs.)	Total Cost (\$)
	A				\$98	\$41	\$122	\$70	\$77	\$42	\$19			D	E			
	Level of Effort (hrs)											B	C			D	E	C+D+E
IM demonstration - at least weekly at each intake	554	554	554	554	80	24	200	800	24	800	24	1952	\$124,308				3,244,224	\$206,599,896
IM alternative can document (approved): none. Cannot document:																		
2x/week	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Site specific EM req.	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Site specific EM req.	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
EM demonstration - at least weekly at each intake	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
EM demonstration alternative: 2x/week	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
More stringent requirements	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Visual or remote inspections	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
<b>Totals</b>	<b>554</b>	<b>554</b>	<b>554</b>	<b>554</b>	<b>80</b>	<b>24</b>	<b>200</b>	<b>800</b>	<b>24</b>	<b>800</b>	<b>24</b>	<b>1,952</b>	<b>\$124,308</b>	<b>\$0</b>	<b>\$30,000</b>	<b>\$154,308</b>	<b>3,244,224</b>	<b>\$256,459,896</b>

**Exhibit A.2b  
Recurring Reporting and Recordkeeping**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total for All Facilities in the ICR Approval Period	
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							Burden (hrs)	Labor Cost	O & M Costs		Total Costs**	Burden (hrs.)	Total Cost (\$)
	A				\$98	\$41	\$122	\$70	\$77	\$42	\$19			D	E			
	Level of Effort (hrs)											B	C			D	E	C+D+E
Demonstrate compliance w/ EM req. would result in a conflict with a safety requirement	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Monthly reports of compliance monitoring for each intake-IM	554	554	554	554	40	16	0	16	8	0	16	96	\$6,610				159,552	\$10,986,485
Approved: none. Cannot document: monthly	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Site specific EM reporting req.	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Site specific EM reporting req.	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Monthly reports of compliance monitoring for each intake-EM	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Monthly reports of compliance monitoring alternative for each intake	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
More stringent requirements	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Status Report related to Compliance Schedule: 4x/year	0	0	0	0	0	0	0	0	0	0	0	0	\$0				-	\$0
Weekly demonstration of reduced flow - New Units	3	6	9	9	0	26	0	0	0	0	0	26	\$1,063				468	\$19,141
Annual Certification	557	560	563	563	2	0	0	0	0	0	2	4	\$235				6,720	\$394,464
<b>Totals</b>	<b>557</b>	<b>560</b>	<b>563</b>	<b>563</b>	<b>42</b>	<b>42</b>	<b>0</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>18</b>	<b>99</b>	<b>\$6,786</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$7,786</b>	<b>166,740</b>	<b>\$13,080,090</b>

**Total Burden and Cost for All Annual Activities**

	Facilities (Respondents)				Total Burden (hrs.)	Total Cost (\$)
	Year 1	Year 2	Year 3	Total		
<b>Totals</b>					<b>3,410,964</b>	<b>\$269,539,986</b>

**Exhibit A.3  
Director Burden and Cost Estimates for Activities**

**Exhibit A.3a  
Director Start-up Activities**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Director	Labor Cost per Director	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Read and Understand Rule	46	-	-	46	12	12	0	24	\$1,188			1,104	\$54,648
Mobilization/Planning	46	-	-	46	24	16	0	40	\$2,080			1,840	\$95,680
Training	46	-	-	46	4	32	0	36	\$1,432			1,656	\$85,872
<b>Totals</b>	<b>46</b>	<b>-</b>	<b>-</b>	<b>46</b>	<b>40</b>	<b>60</b>	<b>0</b>	<b>100</b>	<b>\$4,700</b>	<b>\$200</b>	<b>\$4,900</b>	<b>4,600</b>	<b>\$225,400</b>

**Exhibit A.3b  
Director Permit Application Activities for power plants with DIF≥250 MG**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Response	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Source water physical data	539	-	-	539	1	3	0	4	\$173			2,156	\$93,247
Review Cooling water intake structure data	539	-	-	539	1	3	0	4	\$173			2,156	\$93,247
Review Source water baseline biological characterization	539	-	-	539	2	8	0	10	\$420			5,390	\$226,380
Review Cooling water system data and recordkeeping	539	-	-	539	1	3	0	4	\$173			2,156	\$93,247
Review Proposed IM sampling plan	539	-	-	539	2	8	0	10	\$420			5,390	\$226,380
Review Proposed IM reduction plan results	-	-	-	-	2	8	0	10	\$420			-	\$0
Review Documentation of performance studies	539	-	-	539	1	3	0	4	\$173			2,156	\$93,247
Review Documentation of operational status	539	-	-	539	1	3	0	4	\$173			2,156	\$93,247
Review Documentation of velocity 125.94(b)(2)(i-ii) - can document	-	-	-	-	1	3	0	4	\$173			-	\$0
Review Documentation of velocity 125.94(b)(2)(i-ii) - cannot document, proposed monitoring plan	-	-	-	-	1	3	0	4	\$173			-	\$0
Review Documentation of technology to minimize the impingement of shellfish	539	-	-	539	1	3	0	4	\$173			2,156	\$93,247
Recordkeeping	539	-	-	539	2	8	4	14	\$536			7,546	\$288,904
<b>Totals</b>	<b>4,851</b>	<b>-</b>	<b>-</b>	<b>4,851</b>	<b>16</b>	<b>56</b>	<b>4</b>	<b>6</b>	<b>\$268</b>	<b>\$500</b>	<b>\$768</b>	<b>31,262</b>	<b>\$1,570,646</b>

**Exhibit A.3c  
Director Permit Application Activities for power plants with DIF≥250 MGD w/ AIF>125 MGD**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Response	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Entrainment characterization study: (i) EM plan with peer reviewers identified	344	-	-	344	4	12	0	16	\$692			5,504	\$238,048
Review Entrainment characterization study: (ii) EM plan w/ peer review completed and begin implementation	344	-	-	344	10	24	2	36	\$1,566			12,384	\$538,704
Review Entrainment characterization study: (iii) completed study	-	344	344	688	10	24	2	36	\$1,566			24,768	\$1,077,408
Review Comprehensive technical feasibility and cost evaluation study	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Benefits valuation study	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Non-water quality and other environmental impacts study	-	-	-	-	-	-	-	-	\$0			-	\$0
Recordkeeping	344	344	344	1,032	2	8	4	14	\$536			14,448	\$553,152
<b>Totals</b>	<b>1,032</b>	<b>688</b>	<b>688</b>	<b>2,408</b>	<b>26</b>	<b>68</b>	<b>8</b>	<b>24</b>	<b>\$1,000</b>	<b>\$500</b>	<b>\$1,500</b>	<b>57,104</b>	<b>\$2,923,312</b>

**Exhibit A.3d  
Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Response	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Source water physical data	-	-	690	690	1	3	0	4	\$173			2,760	\$119,370
Review Cooling water intake structure data	-	-	690	690	1	3	0	4	\$173			2,760	\$119,370
Review Source water baseline biological characterization	-	-	690	690	2	8	0	10	\$420			6,900	\$289,800
Review Cooling water system data and recordkeeping	-	-	690	690	1	3	0	4	\$173			2,760	\$119,370
Review Proposed IM sampling plan	-	-	690	690	2	8	0	10	\$420			6,900	\$289,800
Review Documentation of velocity 125.94(b)(2)(i-ii)	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Documentation of technology to minimize the impingement of shellfish	-	-	690	690	1	3	0	4	\$173			2,760	\$119,370
Review Documentation of performance studies	-	-	690	690	1	3	0	4	\$173			2,760	\$119,370
Review Documentation of operational status	-	-	690	690	1	3	0	4	\$173			2,760	\$119,370
Review Proposed IM reduction plan results	-	-	-	-	-	-	-	-	\$0			-	\$0
Recordkeeping	-	-	690	690	2	8	4	14	\$536			9,660	\$369,840
<b>Totals</b>	<b>-</b>	<b>-</b>	<b>6,210</b>	<b>6,210</b>	<b>12</b>	<b>42</b>	<b>4</b>	<b>6</b>	<b>\$268</b>	<b>\$500</b>	<b>\$768</b>	<b>40,020</b>	<b>\$2,010,660</b>

**Exhibit A.3e  
Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Response	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Entrainment characterization study: (i) EM plan with peer reviewers identified	-	-	25	25	4	12	0	16	\$692			400	\$17,300
Review Entrainment characterization study: EM plan w/ peer review completed and begin implementation	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Entrainment characterization study: (iii) completed study	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Comprehensive technical feasibility and cost evaluation study	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Benefits valuation study	-	-	-	-	-	-	-	-	\$0			-	\$0
Review Non-water quality and other environmental impacts study	-	-	-	-	-	-	-	-	\$0			-	\$0
Recordkeeping	-	-	25	25	2	8	4	14	\$536			350	\$13,400
<b>Totals</b>	<b>-</b>	<b>-</b>	<b>50</b>	<b>50</b>	<b>6</b>	<b>20</b>	<b>4</b>	<b>15</b>	<b>\$614</b>	<b>\$500</b>	<b>\$1,114</b>	<b>750</b>	<b>\$43,200</b>

**Exhibit A.3f  
Director Permit Application Activities for new units**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Response	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Cooling water intake structure data	3	3	3	9	1	3	0	4	\$173			36	\$1,557
Review Cooling water system data and recordkeeping	3	3	3	9	1	3	0	4	\$173			36	\$1,557
Review Proposed IM monitoring plan (IM)	3	3	3	9	2	8	0	10	\$420			90	\$3,780
Review Flow reduction information (EM)	3	3	3	9	2	8	0	10	\$420			90	\$3,780
Review if IM demonstration instead of IM monitoring, need to submit velocity information	-	-	-	-	-	-	-	-	\$0			-	\$0
Review if EM technology instead of velocity demonstration, need to submit CDS	-	-	-	-	-	-	-	-	\$0			-	\$0
Recordkeeping	3	3	3	9	2	8	4	14	\$536			126	\$4,824
<b>Totals</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>45</b>	<b>8</b>	<b>30</b>	<b>4</b>	<b>8</b>	<b>\$344</b>	<b>\$500</b>	<b>\$844</b>	<b>378</b>	<b>\$19,998</b>

**Exhibit A.3g  
Director Annual Activities**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
					Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)
Monthly compliance monitoring/tracking	539	539	539	1,617	1	3	0	4	\$173			6,468	\$279,741
Review Quarterly Status Reports	-	-	-	-	1	3	0	4	\$173			-	\$0
Review Annual Certification Statement and Report	542	545	548	1,635	1	3	0	4	\$173			6,540	\$282,855
Recordkeeping	542	545	548	1,635	0	0	1	1	\$29			1,635	\$47,415
<b>Totals</b>	<b>1,623</b>	<b>1,629</b>	<b>1,635</b>	<b>4,887</b>	<b>3</b>	<b>9</b>	<b>1</b>	<b>3</b>	<b>\$125</b>	<b>\$500</b>	<b>\$625</b>	<b>14,643</b>	<b>\$1,427,511</b>

**Total Burden and Cost for All Director Activities**

											Total Burden	Total Initial Cost
<b>Totals</b>											<b>148,757</b>	<b>\$8,220,727</b>

\* The O&M costs incurred by directors are all ODCs. The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

\*\* There were no estimated Capital costs for any activities performed by directors.

**Exhibit A.4  
Federal Director Burden and Cost Estimates for Activities**

**Exhibit A.4a  
Federal Director Start-up Activities**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Director	Labor Cost per Director	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Read and Understand Rule	1	0	0	1	12	12	0	24	\$1,188			24	\$1,188
Mobilization/Planning	1	0	0	1	24	16	0	40	\$2,080			40	\$2,080
Training	1	0	0	1	4	32	0	36	\$1,432			36	\$1,432
<b>Totals</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>40</b>	<b>60</b>	<b>0</b>	<b>100</b>	<b>\$4,700</b>	<b>\$200</b>	<b>\$4,900</b>	<b>100</b>	<b>\$4,900</b>

**Exhibit A.4b  
Federal Director Permit Application Activities for power plants with DIR≥50 MG**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Source water physical data	15	0	0	15	1	3	0	4	\$173			60	\$2,595
Review Cooling water intake structure data	15	0	0	15	1	3	0	4	\$173			60	\$2,595
Review Source water baseline biological characterization	15	0	0	15	2	8	0	10	\$420			150	\$6,300
Review Cooling water system data and recordkeeping	15	0	0	15	1	3	0	4	\$173			60	\$2,595
Review Proposed IM sampling plan	15	0	0	15	2	8	0	10	\$420			150	\$6,300
Review Proposed IM reduction plan results	0	0	0	-	2	8	0	10	\$420			-	\$0
Review Documentation of performance studies	15	0	0	15	1	3	0	4	\$173			60	\$2,595
Review Documentation of operational status	15	0	0	15	1	3	0	4	\$173			60	\$2,595
Review Documentation of velocity 125.94(b)(2)(i-ii) - can document	0	0	0	-	1	3	0	4	\$173			-	\$0
Review Documentation of velocity 125.94(b)(2)(i-ii) - cannot document, proposed monitoring plan	0	0	0	-	1	3	0	4	\$173			-	\$0
Review Documentation of technology to minimize the impingement of shellfish	15	0	0	15	1	3	0	4	\$173			60	\$2,595
Recordkeeping	15	0	0	15	2	8	4	14	\$536			210	\$8,040
<b>Totals</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>16</b>	<b>56</b>	<b>4</b>	<b>6</b>	<b>\$268</b>	<b>\$500</b>	<b>\$768</b>	<b>870</b>	<b>\$43,710</b>

**Exhibit A.4c  
Federal Director Permit Application Activities for power plants with DIR≥50 MGD w/ AIF>125 MGD**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Entrainment characterization study: (i) EM plan with peer reviewers identified	10	0	0	10	4	12	0	16	\$692			160	\$6,920
Review Entrainment characterization study: (ii) EM plan w/ peer review completed and begin implementation	10	0	0	10	10	24	2	36	\$1,566			360	\$15,660
Review Entrainment characterization study: (iii) completed study	0	10	10	20	10	24	2	36	\$1,566			720	\$31,320
Review Comprehensive technical feasibility and cost evaluation study	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Benefits valuation study	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Non-water quality and other environmental impacts study	0	0	0	-	-	-	-	-	\$0			-	\$0
Recordkeeping	10	10	10	30	2	8	4	14	\$536			420	\$16,080
<b>Totals</b>	<b>30</b>	<b>20</b>	<b>20</b>	<b>70</b>	<b>26</b>	<b>68</b>	<b>8</b>	<b>24</b>	<b>\$1,000</b>	<b>\$500</b>	<b>\$1,500</b>	<b>1,660</b>	<b>\$84,980</b>

**Exhibit A.4d  
Federal Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Source water physical data	0	0	19	19	1	3	0	4	\$173			76	\$3,287
Review Cooling water intake structure data	0	0	19	19	1	3	0	4	\$173			76	\$3,287
Review Source water baseline biological characterization	0	0	19	19	2	8	0	10	\$420			190	\$7,980
Review Cooling water system data and recordkeeping	0	0	19	19	1	3	0	4	\$173			76	\$3,287
Review Proposed IM sampling plan	0	0	19	19	2	8	0	10	\$420			190	\$7,980
Review Documentation of velocity 125.94(b)(2)(i-ii)	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Documentation of technology to minimize the impingement of shellfish	0	0	19	19	1	3	0	4	\$173			76	\$3,287
Review Documentation of performance studies	0	0	19	19	1	3	0	4	\$173			76	\$3,287
Review Documentation of operational status	0	0	19	19	1	3	0	4	\$173			76	\$3,287
Review Proposed IM reduction plan results	0	0	0	-	-	-	-	-	\$0			-	\$0
Recordkeeping	0	0	19	19	2	8	4	14	\$536			266	\$10,184
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>171</b>	<b>171</b>	<b>12</b>	<b>42</b>	<b>4</b>	<b>6</b>	<b>\$268</b>	<b>\$500</b>	<b>\$768</b>	<b>1,102</b>	<b>\$55,366</b>

**Exhibit A.4e  
Federal Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Entrainment characterization study: (i) EM plan with peer reviewers identified	0	0	1	1	4	12	0	16	\$692			16	\$692
Review Entrainment characterization study: EM plan w/ peer review completed and begin implementation	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Entrainment characterization study: (iii) completed study	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Comprehensive technical feasibility and cost evaluation study	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Benefits valuation study	0	0	0	-	-	-	-	-	\$0			-	\$0
Review Non-water quality and other environmental impacts study	0	0	0	-	-	-	-	-	\$0			-	\$0
Recordkeeping	0	0	1	1	2	8	4	14	\$536			14	\$536
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>20</b>	<b>4</b>	<b>15</b>	<b>\$614</b>	<b>\$500</b>	<b>\$1,114</b>	<b>30</b>	<b>\$1,728</b>

**Exhibit A.4f  
Federal Director Permit Application Activities for new units**

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
	Year 1	Year 2	Year 3	Total	Assumed	Loaded	Hourly Rate						
	A				\$62	\$37	\$29						
	Level of Effort (hrs)				B			C	D	C+D	A*B	A*(C+D)	
Review Cooling water intake structure data	0	0	0	-	1	3	0	4	\$173			-	\$0
Review Cooling water system data and recordkeeping	0	0	0	-	1	3	0	4	\$173			-	\$0
Review Proposed IM monitoring plan (IM)	0	0	0	-	2	8	0	10	\$420			-	\$0
Review Flow reduction information (EM)	0	0	0	-	2	8	0	10	\$420			-	\$0
Review If IM demonstration instead of IM monitoring, need to submit velocity information	0	0	0	-	-	-	-	-	\$0			-	\$0
Review If EM technology instead of velocity demonstration, need to submit CDS	0	0	0	-	-	-	-	-	\$0			-	\$0
Recordkeeping	0	0	0	-	2	8	4	14	\$536			-	\$0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>8</b>	<b>30</b>	<b>4</b>	<b>-</b>	<b>\$387</b>	<b>\$500</b>	<b>\$887</b>	<b>-</b>	<b>\$0</b>

Exhibit A.4g

Federal Director Annual Activities

Activity	Directors (Responses)				Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
					Assumed	Loaded	Hourly Rate						
	Year 1	Year 2	Year 3	Total	\$62	\$37	\$29						
	A				Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)
Monthly compliance monitoring tracking	15	15	15	45	1	3	0	4	\$173			180	\$7,785
Review Quarterly Status Reports	0	0	0	-	1	3	0	4	\$173			-	\$0
Review Annual Certification Statement and Report	15	15	15	45	1	3	0	4	\$173			180	\$7,785
Recordkeeping	15	15	15	45	0	0	1	1	\$29			45	\$1,305
<b>Totals</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>135</b>	<b>3</b>	<b>9</b>	<b>1</b>	<b>3</b>	<b>\$125</b>	<b>\$500</b>	<b>\$625</b>	<b>405</b>	<b>\$39,375</b>

Total Burden and Cost for All Federal Director Activities

										Total Burden	Total Initial Cost
<b>Totals</b>										<b>4,167</b>	<b>\$230,059</b>

\* The O&M costs incurred by Federal Directors are all ODCs. The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

\*\* There were no estimated Capital costs for any activities performed by Federal Directors.

## Exhibit A.5

### Respondents for the ICR Period Year by Year by Activity

#### Facilities

	Year 1	Year 2	Year 3	Annual Average <sup>1</sup>
	June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Start-up Activities	1,266	3	3	424
Permit Application Activities for power plants with DIF ≥ 50 MGD	554	0	0	185
Permit Application Activities for power plants with DIF ≥ 50 MGD w/ AIF > 125 MGD	354	354	354	354
Permit Application Activities for Other Existing Facilities with DIF > 2 MGD	0	0	709	236
Permit Application Activities for Other Existing Facilities with DIF > 2 MGD w/ AIF > 125 MGD	0	0	26	9
Permit Application Activities for New Units	3	3	3	3
Compliance Monitoring	554	554	554	554
Recurring Reporting and Recordkeeping	557	560	563	560
<b>Respondents</b>	<b>1,266</b>	<b>560</b>	<b>1,272</b>	<b>1,033</b>

#### State Directors

	Year 1	Year 2	Year 3	Annual Average <sup>2</sup>
	June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Director Start-up Activities	46	0	0	15
Director Permit Application Activities for power plants with DIF ≥ 50 MGD	46	46	46	46
Director Permit Application Activities for power plants with DIF ≥ 50 MGD w/ AIF > 125 MGD	46	46	46	46
Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	46	46	46	46
Director Permit Application Activities for other Existing Facilities w/ AIF > 125 MGD	46	46	46	46
Director Permit Application Activities for new units	46	46	46	46
Director Annual Activities	46	46	46	46
<b>Respondents</b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>46</b>

#### Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
<b>Facilities</b>	1,266	560	1,272	1,033
<b>State Directors</b>	46	46	46	46
<b>Yearly Total</b>	<b>1,312</b>	<b>606</b>	<b>1,318</b>	<b>1,079</b>

[1] Each facility is one respondent. One respondent may be involved in more than one activity; however, in order to avoid double-counting, the maximum number of respondents expected to be involved in the rule activities annually is assumed to be the number of respondents for that year.

[2] Each Director is one respondent.

**Exhibit A.6  
Responses for the ICR Period Year by Year by Activity**

**Facilities**

	Year 1	Year 2	Year 3	Annual Average
	June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Start-up Activities	2,532	6	6	848
Permit Application Activities for power plants with DIF ≥50 MG	4,986	0	0	1,662
Permit Application Activities for power plants with DIF ≥50 MGD w/ AIF>125 MGD	1,062	708	708	826
Permit Application Activities for Other Existing Facilities with DIF > 2 MGD	0	0	6,381	2,127
Permit Application Activities for Other Existing Facilities with DIF > 2 MGD w/ AIF>125 MGD	0	0	52	17
Permit Application Activities for New Units	15	15	15	15
Compliance Monitoring	554	554	554	554
Recurring Reporting and Recordkeeping	1,114	1,120	1,126	1,120
<b>Responses</b>	<b>10,263</b>	<b>2,403</b>	<b>8,842</b>	<b>7,169</b>

**State Directors**

	Year 1	Year 2	Year 3	Annual Average
	June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Director Start-up Activities	46	0	0	15
Director Permit Application Activities for power plants with DIF ≥50 MG	4851	0	0	1,617
Director Permit Application Activities for power plants with DIF ≥50 MGD w/ AIF>125 MGD	1032	688	688	803
Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	0	0	6210	2,070
Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	0	0	50	17
Director Permit Application Activities for new units	15	15	15	15
Director Annual Activities	1623	1629	1635	1,629
<b>Responses</b>	<b>7,567</b>	<b>2,332</b>	<b>8,598</b>	<b>6,166</b>

**Sum for Facilities and Directors**

	Year 1	Year 2	Year 3	Annual Average
	June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
<b>Facilities</b>	<b>10,263</b>	<b>2,403</b>	<b>8,842</b>	<b>7,169</b>
<b>State Directors</b>	<b>7,567</b>	<b>2,332</b>	<b>8,598</b>	<b>6,166</b>
<b>Yearly Total</b>	<b>17,830</b>	<b>4,735</b>	<b>17,440</b>	<b>13,335</b>

## Exhibit A.7

### Hourly Burden for the ICR Period Year by Year for Facilities

#### Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
<b>NPDES Permit Application Activities</b>					
Start-up Activities	A1a	41,778	99	99	13,992
Permit Application Activities for power plants with DIF≥50 MG	A1b	165,092	-	-	55,031
Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A1c	117,174	117,174	117,174	117,174
Permit Application Activities for Other Existing Facilities with DIF > 2 MGD	A1d	-	-	435,326	145,109
MGD	A1e	-	-	6,526	2,175
Permit Application Activities for New Units	A1f	1,203	1,203	1,203	1,203
<b>NPDES Permit Application Activities Total</b>		<b>325,247</b>	<b>118,476</b>	<b>560,328</b>	<b>334,684</b>
<b>Annual Activities</b>					
Compliance Monitoring	A2a	1,081,408	1,081,408	1,081,408	1,081,408
Recurring Reporting and Recordkeeping	A2b	55,490	55,580	55,670	55,580
<b>Annual Activities Total</b>		<b>1,136,898</b>	<b>1,136,988</b>	<b>1,137,078</b>	<b>1,136,988</b>
<b>Yearly Labor Total</b>		<b>1,462,145</b>	<b>1,255,464</b>	<b>1,697,406</b>	<b>1,471,672</b>

## Exhibit A.8

### Hourly Burden for the ICR Period Year by Year for State Directors and Federal Government

#### State Director Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Director Start-up Activities	A3a	4,600	0	0	1,533
Director Permit Application Activities for power plants with DIF≥50 MG	A3b	31,262	0	0	10,421
Director Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A3c	24,473	16,315	16,315	19,035
Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	A3d	0	0	40,020	13,340
Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	A3e	0	0	750	250
Director Permit Application Activities for new units	A3f	126	126	126	126
Director Annual Activities	A3g	4,863	4,881	4,899	4,881
<b>Yearly Total</b>		<b>65,324</b>	<b>21,322</b>	<b>62,110</b>	<b>49,586</b>

#### Federal Director Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Federal Director Start-up Activities	A4a	100	0	0	33
Federal Director Permit Application Activities for power plants with DIF≥50 MG	A4b	870	0	0	290
Federal Director Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A4c	711	474	474	553
Federal Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	A4d	0	0	1,102	367
Federal Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	A4e	0	0	30	10
Federal Director Permit Application Activities for new units	A4f	0	0	0	0
Federal Director Annual Activities	A4g	135	135	135	135
<b>Yearly Total</b>		<b>1,816</b>	<b>609</b>	<b>1,741</b>	<b>1,389</b>

**Exhibit A.9**

**Costs for the ICR Period Year by Year for Facilities**

**Facility Activities Labor Cost**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
<b>NPDES Permit Application Activities</b>					
Start-up Activities	A1a	\$3,127,273	\$7,411	\$7,411	\$1,047,365
Permit Application Activities for power plants with DIF≥50 MG	A1b	\$9,831,339	\$0	\$0	\$3,277,113
Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A1c	\$7,494,333	\$7,494,333	\$7,494,333	\$7,494,333
Permit Application Activities for Other Existing Facilities with DIF > 2 MGE	A1d	\$0	\$0	\$24,432,636	\$8,144,212
MGD	A1e	\$0	\$0	\$416,195	\$138,732
Permit Application Activities for New Units	A1f	\$75,564	\$75,564	\$75,564	\$75,564
<b>NPDES Permit Application Activities Total</b>		<b>\$20,528,510</b>	<b>\$7,577,308</b>	<b>\$32,426,140</b>	<b>\$20,177,319</b>
<b>Annual Activities</b>					
Compliance Monitoring	A2a	\$68,866,632	\$68,866,632	\$68,866,632	\$68,866,632
Recurring Reporting and Recordkeeping	A2b	\$3,796,135	\$3,800,030	\$3,803,925	\$3,800,030
<b>Annual Activities Total</b>		<b>\$72,662,767</b>	<b>\$72,666,662</b>	<b>\$72,670,557</b>	<b>\$72,666,662</b>
<b>Yearly Labor Total</b>		<b>\$93,191,278</b>	<b>\$80,243,970</b>	<b>\$105,096,696</b>	<b>\$92,843,981</b>

**Facility O&M Cost**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
<b>NPDES Permit Application Activities</b>					
Start-up Activities	A1a	\$126,600	\$300	\$300	\$42,400
Permit Application Activities for power plants with DIF≥50 MG	A1b	\$277,000	\$0	\$0	\$92,333
Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A1c	\$177,000	\$177,000	\$177,000	\$177,000
Permit Application Activities for Other Existing Facilities with DIF > 2 MGE	A1d	\$0	\$0	\$354,500	\$118,167
MGD	A1e	\$0	\$0	\$13,000	\$4,333
Permit Application Activities for New Units	A1f	\$1,500	\$1,500	\$1,500	\$1,500
<b>NPDES Permit Application Activities Total</b>		<b>\$582,100</b>	<b>\$178,800</b>	<b>\$546,300</b>	<b>\$435,733</b>
<b>Annual Activities</b>					
Compliance Monitoring	A2a	\$16,620,000	\$16,620,000	\$16,620,000	\$16,620,000
Recurring Reporting and Recordkeeping	A2b	\$557,000	\$560,000	\$563,000	\$560,000
<b>Annual Activities Total</b>		<b>\$17,177,000</b>	<b>\$17,180,000</b>	<b>\$17,183,000</b>	<b>\$17,180,000</b>
<b>Yearly O&amp;M Total</b>		<b>\$17,759,100</b>	<b>\$17,358,800</b>	<b>\$17,729,300</b>	<b>\$17,615,733</b>

**Exhibit A.10**  
**Costs for the ICR Period Year by Year**  
**for State Directors and Federal Government**

**State Director Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Director Start-up Activities	A3a	\$216,200	\$0	\$0	\$72,067
Director Permit Application Activities for power plants with DIF≥50 MG	A3b	\$1,301,146	\$0	\$0	\$433,715
Director Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A3c	\$1,031,705	\$687,803	\$687,803	\$802,437
Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	A3d	\$0	\$0	\$1,665,660	\$555,220
Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	A3e	\$0	\$0	\$30,700	\$10,233
Director Permit Application Activities for new units	A3f	\$5,166	\$5,166	\$5,166	\$5,166
Director Annual Activities	A3g	\$202,588	\$203,337	\$204,086	\$203,337
<b>Yearly Total</b>		<b>\$2,756,805</b>	<b>\$896,306</b>	<b>\$2,593,415</b>	<b>\$2,082,176</b>

**State Director O&M**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Director Start-up Activities	A3a	\$9,200	\$0	\$0	\$3,067
Director Permit Application Activities for power plants with DIF≥50 MG	A3b	\$269,500	\$0	\$0	\$89,833
Director Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A3c	\$172,000	\$172,000	\$172,000	\$172,000
Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	A3d	\$0	\$0	\$345,000	\$115,000
Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	A3e	\$0	\$0	\$12,500	\$4,167
Director Permit Application Activities for new units	A3f	\$1,500	\$1,500	\$1,500	\$1,500
Director Annual Activities	A3g	\$271,000	\$272,500	\$274,000	\$272,500
<b>Yearly O&amp;M Cost Total</b>		<b>\$723,200</b>	<b>\$446,000</b>	<b>\$805,000</b>	<b>\$658,067</b>

**Federal Director Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Federal Director Start-up Activities	A4a	\$4,700	\$0	\$0	\$1,567
Federal Director Permit Application Activities for power plants with DIF≥50 MG	A4b	\$36,210	\$0	\$0	\$12,070
Federal Director Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A4c	\$29,991	\$19,994	\$19,994	\$23,327
Federal Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	A4d	\$0	\$0	\$45,866	\$15,289
Federal Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	A4e	\$0	\$0	\$1,228	\$409
Federal Director Permit Application Activities for new units	A4f	\$0	\$0	\$0	\$0
Federal Director Annual Activities	A4g	\$5,625	\$5,625	\$5,625	\$5,625
<b>Yearly Total</b>		<b>\$76,526</b>	<b>\$25,619</b>	<b>\$72,713</b>	<b>\$58,286</b>

**Federal Director O&M**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015	
Federal Director Start-up Activities	A4a	\$200	\$0	\$0	\$67
Federal Director Permit Application Activities for power plants with DIF≥50 MG	A4b	\$7,500	\$0	\$0	\$2,500
Federal Director Permit Application Activities for power plants with DIF≥50 MGD w/ AIF>125 MGD	A4c	\$5,000	\$5,000	\$5,000	\$5,000
Federal Director Permit Application Activities for other Existing Facilities with DIF > 2 MGD	A4d	\$0	\$0	\$9,500	\$3,167
Federal Director Permit Application Activities for other Existing Facilities w/ AIF>125 MGD	A4e	\$0	\$0	\$500	\$167
Federal Director Permit Application Activities for new units	A4f	\$0	\$0	\$0	\$0
Federal Director Annual Activities	A4g	\$7,500	\$7,500	\$7,500	\$7,500
<b>Yearly O&amp;M Cost Total</b>		<b>\$20,200</b>	<b>\$12,500</b>	<b>\$22,500</b>	<b>\$18,400</b>

## Exhibit A.11

### Summary of the Burden, Respondents, Responses, and Costs for the ICR Period by Year and Annual Averages

#### Facilities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total <sup>1</sup>
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015		
Burden (hours)	A7	1,462,145	1,255,464	1,697,406	1,471,672	4,415,015
Respondents (number)	A5	1,266	560	1,272	1,033	3,098
Responses (number)	A6	10,263	2,403	8,842	7,169	21,508
Costs (labor)	A9	\$93,191,278	\$80,243,970	\$105,096,696	\$92,843,981	\$278,531,944
Costs (Other Direct Costs)	A9	\$17,759,100	\$17,358,800	\$17,729,300	\$17,615,733	\$52,847,200
<b>Total Costs</b>		<b>\$110,950,378</b>	<b>\$97,602,770</b>	<b>\$122,825,996</b>	<b>\$110,459,715</b>	<b>\$331,379,144</b>

[1] Each facility is one respondent. One respondent may perform activities in more than one year. So to avoid double-counting, the respondent 3 year total, is the total number of facilities that must perform one or more activities during the ICR approval period.

#### Directors

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total <sup>1</sup>
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015		
Burden (hours)	A8	65,324	21,322	62,110	49,586	148,757
Respondents (number)	A5	46	46	46	46	138
Responses (number)	A6	7,567	2,332	8,598	6,166	18,497
Costs(labor)	A10	\$2,756,805	\$896,306	\$2,593,415	\$2,082,176	\$6,246,527
Costs (Other Direct Costs)	A10	\$723,200	\$446,000	\$805,000	\$658,067	\$1,974,200
<b>Total Costs</b>		<b>\$3,480,005</b>	<b>\$1,342,306</b>	<b>\$3,398,415</b>	<b>\$2,740,242</b>	<b>\$8,220,727</b>

[1] Each director is one respondent. One respondent may perform activities in more than one year. So to avoid double-counting, the respondent 3 year total, is the total number of directors that must perform one or more activities during the ICR approval period.

#### Federal Government

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		June 2012 - May 2013	June 2013 - May 2014	June 2014 - May 2015		
Burden (hours)	A8	1,816	609	1,741	1,389	4,167
Costs(labor)	A10	\$76,526	\$25,619	\$72,713	\$58,286	\$174,859
Costs (O&M)	A10	\$20,200	\$12,500	\$22,500	\$18,400	\$55,200
<b>Total Costs</b>		<b>\$96,726</b>	<b>\$38,119</b>	<b>\$95,213</b>	<b>\$76,686</b>	<b>\$230,059</b>

#### Totals for Respondents (Facilities and Directors)\*

	Annual Average	Three Year Total
Total Respondent Burden (hours)	1,521,257	4,563,772
Total Respondents (number)	1,079	3,236
Total Respondent Labor Costs	\$94,926,157	\$284,778,471
Total Respondent Capital and O&M Costs	\$18,273,800	\$54,821,400
<b>Total Respondent Cost for All Activities</b>	<b>\$113,199,957</b>	<b>\$339,599,871</b>

\* Totals for annual averages may not match exactly due to rounding discrepancies