APPENDIX 1

Appendix 1 - IRP Regulation Compliance Matrix

IRP Regulation No.	Requirement	IRP Section	Comments
General 1.3	In accordance with 26 Del. C. 1007, DPL shall file an IRP on Dec 1, 2006 and on the anniversary date of the first filing date every other year thereafter		The IRP was filed on December 1, 2010.
General 1.4	The IRP shall be filed in compliance with normal Commission policies and practices		The IRP was filed in accordance with all prevailing Commission rules and procedures.
General 1.5	The IRP shall identify the individuals resopnsible for its preparation and those individuals who shall be available to inquiries during the Commission's review of the plan	Appendix 2	A listing of the individuals responsible for preparing this IRP and will be available for inquiries during the Commission's review of this IRP has been provided as Appendix 2 of the IRP.
General 1.6	Confidential utility documents shall be presented under separate seal		Confidential documents related to this IRP were presented to the Commission, Staff, DPA and DNREC under separate seal. This material included the Generation Siting Study and Power Flow Analysis as required under Commission Order No. 7661 issued September 22, 2009. In addition, due to the timing of the filing of this IRP with the SOS auction process, Delmarva has filed certain pricing information as confidential so as to not bias the auction bids unfavorably. Upon completeion of the auction process, this information will be deemed non-confidential by the Company and made available consistent with prevailing SOS Auction guidelines.
General 1.8	The utility shall provide whatever detail and commentary necessarry to demonstrate that it has met or exceeded the planning requirements as set forth in this regulation. An effort shall be made to ensure that the IRP is clearly stated and can be readily comprehended by the Commission, State Agencies and other interested parties. The IRP shall include an Executive Summary.	Executive Summary, Technical Appendices	A IRP Regulation Compliance matrix has been included as Appendix 1 to the IRP. An Executive Summary consistent with Regulation 3.2.1 is provided as Section 1 of the IRP. Technical information has been relegated to Appendices in order to keep the IRP clear and starightforward.
General 1.9	Compliance with this regulation is a minimum standard for IRPs. The company needs to exercise its professional judgment based on its systems and customer needs. The Company shall include all information that assists the reader to fully understand the IRP concept and the Company's IRP to meet SOS energy needs.	Executive Summary	Delmarva has provided an Executive Summary consistent with the IRP Regulations. Most technical materials related to the IRP have been provided in provided in Appendices. Delmarva has attemted to provide all information needed to assist the reader in understanding the IRP in a clear and starightforward manner.
General 1.10	This regulation requires the maintenance and retention of supply resource planning data and the reporting of IRP achievements on an annual basis starting in 2009 to the Commission, Governor and General Assembly. The Company shall retain such data consistent with Federal data retention guidelines andmake it avaialabel for furhter reveiw as necessary.		Delmarva will retain IRP information consistent with Federal data retention guidelines. Delmarva reported on the IRP to the Commission, Governor, and General assembly in 2009 and will submit a new report prior to December 31, 2010.
General 1.11	DPL shall submit 8 copies of the IRP to the Commission, 2 copies to the Controller General's office, 2 copies to the Office of Management and budget, and 2 copies to DNREC. The Commission may request up to 6 additional copies for review		DPL submited 8 copies of the IRP to the Commission, 2 copies to the Controller General's office, 2 copies to the Office of Management and budget, and 2 copies to DNREC on December 1, 2010.
General 1.14	DPL shall make the full IRP, including any appendicies or othe supporting mateirals, available to the general public on its web site and shall update these materials on the company's web site to remain current with all subsequent updates		Delmarva has set up a webpage and attached all the documents from the IRP workshops that have occurred since Sept 22, 2009. Delmarva will also attach the full IRP to the website after the IRP is filed.

	A	B	C	D
15	General 3.1.1	The IRP shall provide a framework for comparing a comprehensive resource mix of supply and demand-side and Transmission Service resource costs and attributes	Section 3, 3b (DSM), Transmission (3c), Supply Resources (3d) and Appendix 4 (IPM®).	The IRP uses a detailed and comprehensive planning model (IPM®) to evaluate the optimal combination of demand and supply side resources within PJM, including Delaware. The IPM® uses the most recent PJM Regional Transmission Expansion Plan (RTEP) to characterize the expected future transmission grid. Supply side resources are described in Section 3d and the IPM® is described more fully in Appendix 4 of the IRP. The RTEP is described in Section 3c. Demand side options are described in Section 3b.
16	General 3.1.2	The IRP shall utiltize a Resource Portfolio in achieving the objectives of the IRP, shall incorporate a Resource Portfolio approach to securing resouces and incorporating an analysis of risk versus certainty into the planning process, or absent such a Porfolio approach, the rationale supporting the exclusion.	Section 4, Appendix 5	The Reference Case of the IRP employs a Resource Portfolio approach to secure supply resources through the competititve Full Requirements Service (FRS) auction and a portfolio of a diverse mix of renewable resources. The IRP also describes the effects of several scenarios involving additional wind and gas-fired resources.
17	General 3.1.3	The IRP shall provide for a regulatory, stakeholder, and public input into the development of the IRP in accordance with normal Commission policies and practices		In accordance with the schedule provided in Commission Order No 7661, 5 informal IRP workshops among the parties were held in the Fall of 2009. Also in accordance with the procedural schedule, 3 public hearings were scheduled for Jan 11, 12, and 13, 2010 respectively in Wilmington, Georgetown and Dover. Delmarva and the parties agreed to continue the informal workshops beyond what was required in the procedural schedule and held additional workshops in February and March 2010. The presentations made at these workshops can be found at the following website: http://www.delmarva.com/energy/renewable/de/irp.aspx.
18	General 3.1.4	The IRP shall include provisions for the IRP to be modified from time to time as may be necessary to conform with any subsequent legislative or regulatory directives		The Commission issued Order No 7755 on March 30, 2010. this Order granted Delmarva an extension of time for filing this IRP. During the interim before filing this IRP, Delmarva updated numerous assumptions incuding the PJM RTEP, new Delaware RPS, and new environmental requirements.
19	General 3.2.1	Thr IRP shall include an executive summary with a short description of the utility, its customers, service territory, current facilities, planning objectives, notable areas of departure in the new IRP from the old, citing specific locations within the IRP where the new aspects shall be found, load forecast, proposed IRP and Implementation Plan.	Executive Summary	An Executive Summary of the IRP with the specific information requested under this regulation is provided as Section 1 of the IRP
20	General 3.2.2	Established Plan objectives in quantitative and qualitative terms by which the IRP achievements may be measures and shall not be biased against any particular option. Measures must be ascribed to each objective. The Company must include a summary of the overall [process and models used in developing the IRP.	Executive Summary - Objectives and measures; Section 3 - summary of overall process and models used in developing the IRP; Appendices 4,5,6 &7 for technical information on the models.	Plan objectives and measures are described in the Executive Summary of the IRP. Each objective has measures ascribed to them. The major models used in developing the IRP include: IPM®, Portfolio model, CMAQ, BenMAP, and TMM. These models are used singly or in combination to simulate expected generation expansion, long term wholesale prices, price and price stability, health effects of incremental changes in power plant emissions and life cycle analysis. The overall IRP process is decribed in Section 3. Technical descriptions and details on these models are provided in Appendices 4,5,6& 7.

	A	B	C	D
21	General 3.2.3	A description of the load forecast, the assumptions used or implicit in creating the forecast, the range of forecasts examined and the forecast selected for the filing period and a detailed rationale for such selection.	Section 3a, Appendix 3	The load forecast is described in Section 3a of the IRP. The forecast provides "high" and "low" ranges as compared to a "baseline" forecast. The documentation of the load forecast is provided in Appendix 3.
22	General 3.2.4	The IRP shall include an Integrated Resource Evaluation which shall include a listing of all the options considered to meet the load forecast, identification of those chosen for further evaluation and possible inclusion in the IRP, and a discussion of the rationale for such selections including any key assumptions. The IRP shall include planning information which shall include a 10 year planning horizon, starting with the year immediately following the filing year	Section 3, 3b, 3c, 3d, 4 and Appendix 4	All the resource options evaluated within IPM® are listed in Section 3d and Technical Appendix 4 of the IRP. Key assumptions for the Reference Case are provided in Section 3 and 4 of the IRP. The IRP presents information for the ten year planning horizon 2011-2020. The further evaluation of additional wind and gas fired generation resources using scenario analyses is also described Section 4.
23	General 3.2.5	A Scenario Analysis used to integrate the options into a single resource plan or inidvidual scenarios for further review and analysis to include a listing of the various scenariois considered and any key assumptions	Executive Summary , Section 4	The IRP evaluates the potential impact on price, price stability, and environmental benefits of three scenarios involving additional wind and gas-fired generation resources. The scenarios are described more fully in section 4 of the IRP
24	General 3.2.6	The IRP shall include a description of the process used to develop the proposed IRP, including the assumptions and analysis leading up to the decision and the application of the various criteria as specified in section 5.0	Section 3	The development of the IRP is described in detail in Section 3. Discussions around the IRP process have taken place at the workshops with the other stakeholders since the Fall of 2009.
25	General 3.2.7	The IRP shall include an analysis of the risk and sensitivity of the proposed IRP in comparison to the other options that were considered and a contingency plan to meet the Plan Objectives should one of the supply, demand, or transmission options be either delayed or not realized.	Section 3, Appendix 5	The results of various risk and sensitivity analysis around key parmanters is provided in Appendix 5.
26	General 3.2.8	The IRP shall include plans fro the implemention of the IRP, for no less than 5 years, starting with the year immediately following the filing year	Executive Summary	Implementation plans for achieving the planning objectives of the IRP are provided in the executive summary of the IRP.
27				
28	Load Forecast 4.1.1	DPL shall consider a range of load growth forecasts that includes both historical data and future estimates	Appendix 3	DPL's IRP Reference Case load growth forecast is based on historical data and estimates of future DSM activity. More Detailed documentaion of the load forecast is provided in Appendix 3
29	Load Forecast 4.1.2	DPL's load growth forecasts should include both winter and summer peak demand for Delmarva Delaware load	Appendix 3	DPL's IRP Reference Case load growth forecast includes both winter and summer peak demand for Delmarva Delaware Load as shown in Appendix 3.
30	Load Forecast 4.1.2	DPL's load growth forecasts should include Delmarva Delaware SOS load by customer class	Section 3a, Appendix 3	DPL's IRP Reference Case load growth forecast includes a breakdown by customer class.
31	Load Forecast 4.1.3	DPL's load growth forecasts should include weather adjustments, including consideration of climate change potential	Appendix 3	DPL's IRP Reference Case load growth forecast includes a severe weather case. The severe weather case represents a 90/10 scenario, where the degree days used in the equations are at the 90th percentile for both cooling and heating degree days.
32	Load Forecast 4.1.4	DPL's load growth forecasts should include 5 year historical loads, current year-end estimate and 10 year weather adjusted forecast showing individually and aggregated Delmarva Delaware and Delmarva SOS load and both Delmarva Delaware and Delmarva Delaware SOS load by disaggregated by customer class, including both capacity (MW) and energy requirements (MWh).	Appendix 3	DPL's IRP Reference Case load growth forecast includes 5 year historical loads as shown in Appendix 3.
33	Load Forecast 4.1.5	DPL's load growth forecasts should include analysis of how existing and forecast Conservation, DR, DSM, Customer sited generation, various economic and demographic factors including the price of electricity will affect the comsumption of electric services and how customer choice under Retail Competition of utility service may affect future loads.	Section 3b	The effect of energy efficiency and direct load control programs are discussed in Section 3b

	A	B	C	D
34	Load Forecast 4.1.6	DPL's load growth forecasts should include a description of the process the company used to develop these forecasts. Forecasts should include the probability of occurrence. Within the forecasting modeling descriptions, DPL shall demonstrate how well its model predicted past load data for the prior 5 years	Appendix 3	DPL's IRP Reference Case load growth forecast includes a description of the process the company used to develop these forecasts as shown in DE IRP Demand Forecast Documentation provided as Appendix 3.
35				
36	Resource Portfolio Options 5.1	DPL shall include a description of the overall process and the analytical techniques it used to identify its proposed option. The Company shall not rely exclusively on any particular resource of purchase or procurement policy.	Section 3, Section 4	The IRP process is described in Section 3. The IRP provides analyses of the Reference case and the alternative scenarios based upon price, price stability, and environmental benefits. This information is provided for each case/scenario for the Commission's consideration.
37	Resource Portfolio Options 5.2	DPL shall identify and evaluate all resource options including generation and transmission service, Supply contracts, both short- and long-term procurement DSM, DR and customer sited generation, even if a particular strategy is ultimately not recommended by the company. The IRP must show an investigation of all reasonable opportunities for a more diverse supply at the lowest reaonable cost, including consideration of environmental benefits and externalities. The company shall also provide any hedging guidelines and shall identify any changes from anyexisting hedging policy. Cost evaluations shall contain a description of each option and an evaluation that considers the economic and environmental value of the following:	Section 3, 3b, 3c, 3d, 3e, 3f, Section 4	The IRP considers a full range of transmission, demand side, and supply resources with particular attention to renewable resources and environmental benefits.
38	Resource Portfolio Options 5.2.1	resources that utilize New or Innovative Baseload Technologies	Appendix 4	The IPM® considers new and innovative baseload technologies within the set of potential resource options.
39	Resource Portfolio Options 5.2.2	resources that provide short or long-term environmental benefits to the citizens of Delaware	Section 3e, 3f, Appendix 6, Appendix 7	Detailed environmental cost and benefit analysis is provided for the alternate scenarios.
40	Resource Portfolio Options 5.2.3	facilities that have existing fuel and transmission infrastructure		These factors were condsidered in the generation siting study submitted January 15, 2010.
41	Resource Portfolio Options 5.2.4	facilities that utilize existing brownfield or industrial sites		These factors were condsidered in the generation siting study submitted January 15, 2010.
42	Resource Portfolio Options 5.2.5	resources that promote Fuel Diversity	Section 4	The IRP provides a detailed analyses of the economic and environmental factors affecting additional procurement of wind energy and gas -fired generation.
43	Resource Portfolio Options 5.2.6	resources or facilities that support or improve reliability		A confidential power flow study was submitted February 18 indicating the effect on relaibility of adding gas fired generation resources under several contingency cases.
44	Resource Portfolio Options 5.2.7	resources that encourage price stability		The IRP provides a detailed evaluation of numerous portfolios and the effect on price stability by varying underlying assumptions.
45	Resource Portfolio Options 5.3	Where Transmission Service is identified as a planning option, DPL shall describe the transmission enhancement, the location, and provide PJM's assessment of the impact of the proposed transmission asset when available. The IRP shall reflect the current projects included in PJM's Regional Transmission Expansion Plan ("RTEP"). DPL shall file with the Commission any PJM revisions or updates to the RTEP immediately after receipt.	Section 3c	The IRP includes a description of the transmission investments made since the last IRP and planned transmission investments needed to maintain reliability.
46	Resource Portfolio Options 5.4	At least 30% of the resource mix shall be acquired through the regional Wholesale Electricity Market via a bid procurement or auction process held by DPL	Appendix 5	The Reference Case portfolio presented in the IRP meet this requirement.
47	Resource Portfolio Options 5.5	DPL shall also include a discussion of known plans to reduce existing physical, contractual, or service related portfolio resources during the IRP planning period	Section 3d, Section 4	The IRP includes the planned retirement of Indian River unit #3 and the environmental upgrades to Indian River Unit #4. The IRP also includes the Calpine owned Edgemoor units not using coal after July1, 2010.
48	Resource Portfolio Options 5.6	The Company shall include a detailed description of its energy efficiency activities in accordance with 26 Del. C. S352. The Company shall first consider electricity DR and DSM strategies for meeting base load and load growth needs and cost-effective renewable energy resources before considering traditional fossil fuel-based electric supply services to meet their retail electricity supplier obligations as defined in 26Del. C. S 352	Section 3b	Section 3b of the IRP provides a detailed discussion of the Company's planned demand side activities including its working relationship with the SEU.

	A	B	C	D
49	Resource Portfolio Options 5.7	DPL shall evaluate all technically feasible and cost effective DR improvements. Where non-Company evaluations of DSM and Conservation are available through the Sustainable Energy Utility ("SEU") (of other organization as requested by the commission, the Company shall summarize the results and actions taken of non-DPL evaluations of DSM and Conservation available through the SEU (or any other organization requested by the Commission). DPL shall collaborate and may contract with the SEU to provide services to accomplish the SEU's DSM plans.The comopany, using its independent best judgment may recommend in the IRP andy DSM program first offered to the SEU but rejected by the SEU.Where DR programs are new, DPL shall summarize the anticipated benefits with repsect to load reductions and provide supporting materials to justify the new program	Section 3b	An IRP working group meeting was held Oct 22, 2009 to discuss this topic. The DSM evaluation process is discussed in Section 3b.
50	Resource Portfolio Options 5.8	DPL shall collaborate with the SEU and appropriate State Agencies in its evaluation of Customer-Sited Generation resources options. The Company may enter into a contractual relationship with the SEU of other energy service providers to implement a Customer-Sited Generation resource option strategy.	Section 3b, Appendix 10	Section 3b provides a discussion of customer sited resource options. A CHP potential study is provide as Appendix 10.
51	Resource Portfolio Options 5.9	DPL shall assess the Resource Portfolio options against the set of Plan Objectives and criteria	Section 4	The IRP provides a comparison of the Reference Case with the alternative scenario cases.
52				
53	Plan Development 6.1	DPL shall conduct an Integrated Resource Evaluation in formulating its potential plans for supply and demand-side resource scenarios. DPL shall describe the mechanism or process by which the Load Forecast and options have been blended into the various IRP scenarios. In integrating its supply and demand-side resources the Company shall:	Section 3, Section 4	The IPM® model provides an integrated planning platform. The Reference case assumes that the Demand side targets from the Energy Efficiency Act of 2009 are met.
54	Plan Development 6.1.1	Prepare an evaluation that takes into consideration the life expectancy of the resource, if the resource provides capacity and/or energy, any improvement to system reliability, the dispatchability of the source, any lead time requirements, the flexibility of the resource, the Generation Attributes of the resource, the efficiency of the resource and the opportunities for customers' participation. DPL's valuation shall assess the probability of securing the options according to modeling information used, including any key assumptions. DPL shall provide the estimated energy and capacity impacts for each option and the rationale behind the estimate.	Sec 3, 3b, 3c, 3d,3e, 3f	These factors are considered in the IPM®, the DSM evaluations, or the environmental benefits evaluations
55	Plan Development 6.1.2	DPL shall prepare a contingency plan that shall include a discussion of how the company might alter the proposed IRP in the future if the key planning assumptions used to develop the proposed IRP in the future turn out to be different than what was assumed in preparing the proposed IRP	Sections 3b, 3c, 3f	The IRP provides a review of key planning assumptions and possible contingency plans in the event some of these assumptions are not realized.
56	Plan Development 6.1.3	DPL shall evaluate the cost-effectiveness of the options from the persepctives of the utility and the different classes of ratepayers based on real prices (may also provide nominal prices)	Appendix 8	All costs, rates and environmental benefits have been presented in real terms. Also, in Appendix 8, the IRP presents the expected rates for energy by customer class.
57	Plan Development 6.1.4	DPL shall include a current evaluation, detailing and giving consideration to environmental benefits and externalities associated with the utilization of specific methods of energy production (may rely on commonly available published research and not on original research by DPL). To the extent that any reliable, relevant peer reviewed published research includes life cycle analysis encompassing energy extraction, transport, generation, and/or use is commonly available, DPL shall include such research and studies in its evaluation	Appendix 7	Delmara prepared a life cycle and impact analysis of the three IRP Scenarios.
58	Plan Development 6.1.5	The IRP shall not include any assumptions that externalities are adequately addressed by either the fact that the IRP meets the RPS, satisfies the Energy Efficiency Resource Standards or that the generating units to be utilized comply with existing environmental regulations. This rule does not, however, preclude a potential conclusion that the RPS or EERS in effect at the time adequately address externalities.	Appendix 6	The IRP specifically evaluates scenarios where the amount of renewable energy acquired is greater than the RPS standard.
59	Plan Development 6.1.6	DPL shall evaluate the financial, competitive, reliability and operational risks associated with the options recommended by the IRP and how these risks may be mitigtaed over the 10 year planning period. Each candidate plan shall include a discussion of the likelihood of the occurrence of such risks.	Appendix 5	A sensitivity analysis around some key planning assumptions us provided in Appendix 5.
60	Plan Development 6.1.7	For the options included in the proposed plan identified in the IRP, the IRP shall include an analysis of the fuel risk associated with the proposed Resource Portfolio and how such fuel risk will be mitigated when the proposed IRP is implemented	Appendix 5	A sensitivity around different levels of gas prices is provided in Appendix 5.
61	Plan Development 6.1.8	DPL shall perform sensitivity analysis on each of the candidate plans to include variations in key assumptions and to assess the likelihood of planned outcomes. These shall include the impact of proposed or existing rules and regulations on a local, regional, or national level related to climate change	Section 4, Appendix 5	Sensitivity cases are presented in Appendix 5. An environmental "boundary" case is also evaluated in Section 4.

	A	B	C	D
62	Plan Development 6.2	DPL shall forward a copy of the IRP to DNREC and seek input into externalities, including but not limited to, health effects		The Company has held several discussions with DNREC to discuss the most appropriate methods on evaluating externaities in the evaluation of human health impacts and life cycle analysis.
63	Plan Development 6.3	In developing candidate plans, special attention shall be given to ensuring consistency between the IRP and typical rate-making proceses. In addition to the ultimate consumer price associated with the plan, the stability of rates and other factors discussed in Section 5.2 need to be considered in any candidate plan selection	Appendix 5, Appendix 8	The IRP provides an evalutation of the potential change on energy costs on customer rates.
64				
65	Proposed Plan Selection 7.1	DPL shall select and file the proposed IRP that is the most consistent with the criteria set forth in 26 Del. C. 1007 and this Regulation. DPL shall provide a description of the options recommended for inclusion in the proposed IRP, including a description of the mechanism or process used for valuing each option. DPL shall describe the rationale behind its selection, including any modeling or methodology used as the basis for selection of the proposed IRP.	Executive Summary, Section3, Section 4	The IRP conforms with EURCSA and these regulations.
66	Proposed Plan Selection 7.2	DPL shall provide at a minimum a 5 year forecast of supply rates by customer class that would be anticipated based on the IRP planning assumptions and recommended procurement strategy	Appendix 8	The forecast of supply rates by customer class is provided in Appendix 8 of the IRP.
67				
68	Implementaion Plan 8.1	DPL shall file a 5 year plan outlining the resource decisions intended to implement the IRP	Exective Summary	Implementation plans are provided in the Executive Summary
69	Implementaion Plan 8.1.1	This Implementation Plan shall include all actions to be taken in the first 2 years and outline actions anticipated in the last 3 years	Executive Summary	The implemenation plans are provided in the Executive Summary
70	Implementation Plan 8.1.2	For IRPs filed on or after December 1, 2010, the Implementation Plan shall include a status report of the specific actions contained in the previous Implementation Plan, including what risk assumptions were made and what actually occurred	Executive Summary	This information is provided for each 2008 objective in the Executive Summary.
71	Implementation Plan 8.1.3	The Implementation Plan shall include a schedule of key activities related to the IRP implementation	Executive Summary	The implemenation plans are provided in Sthe Executive Summary
72				
73	Review and Comment 9.1	Commencing in 2009 and continuing on an annual bases, DPL shall submit a report to the Commission, the Governor, and the General Assembly detailing their progress in implementing their IRPs		The Company provided a report on the status of the IRP to the General Assembly in December 2009. A new report will be prepared for December 2010.
74	Review and Comment 9.2	The commission, interested State Agencies, interested parties and the general public shall be provided an opportunity for review and comment on the Company's IRP filing. The Commission shll seek input from DNREC on the issues of externalities and environmental benefits due to emission, as the result of the IRP.		
75	Review and Comment 9.3	To the extent that the Commission determines that the IRP is not compliant with the statute or is unlikely to meet the goals of the statute, DPL shall revise its IRP to meet these requirements		As shown in this Appendix, the IRP is compliant with each requirement of the Statute.
76	Review and Comment 9.3	Rate treatment shall be addressed in rate or other proceedings as filed by the utility or as initiated by the Commission		The Company is not requesting approval of any changes to customer rates in this proceeding.
77	Review and Comment 9.4	DPL must maintain sufficient records to permit a review and confirmation of material contained in all required reports as they are subject to annual review and audit by the Commission and interested State Agencies		All records related to the IRP will be stored and available for inspection and audit as needed.