



April 15, 2010

NG-10-0205

Chief, Rulemaking and Directives Branch  
Division of Administrative Services  
Office of Administration  
Mailstop T-6D59  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Duane Arnold Energy Center  
Docket 50-331  
License No. DPR-49

*2/10/2010*  
*15 FR 6737*  
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RULES AND DIRECTIVES  
BRANCH  
USNRC

Subject: Comments on Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 42 Regarding Duane Arnold Energy Center

References: NUREG-1437 Supplement 42 Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 42 Regarding Duane Arnold Energy Center Draft Report for Comment

NextEra Energy Duane Arnold, LLC ("NextEra") would like to take the opportunity to comment on the referenced Draft Supplemental Environmental Impact Statement ("DSEIS") for the Duane Arnold Energy Center. NextEra's comments are attached and have been categorized as either substantive or editorial. The three most significant comments are contained in this letter as well as the attachment.

First, as currently written, the wording of line 36 on page 2-24 could be interpreted as requiring the Iowa Department of Natural Resources ("DNR") to issue a new National Pollutant Discharge Elimination System (NPDES) permit before the NRC can issue a renewed license. NextEra's current NPDES permit is valid and the NRC's issuance of a renewed license should not be predicated on the issuance of a renewed NPDES permit. This position is based on NextEra's timely application for renewal of the NPDES permit with the Iowa DNR. In regard to all other permits listed in Table 1-2, NextEra has confirmed that all have been renewed with the exception of those associated with a one-time dredging operation (PF07-015, 06-141 and 07-175).

Second, the corporate name "FPL Energy Duane Arnold, LLC" was changed to "NextEra Energy Duane Arnold, LLC" in April 2009, several months after the license renewal application was filed. To avoid any confusion, we suggest that "FPL Energy Duane Arnold, LLC (FPL-DA)" be replaced with "NextEra Energy Duane Arnold, LLC, fka FPL Energy Duane Arnold, LLC (FPL-DA)" in the Abstract (page v line 2), Executive Summary (page xv line 3), and Section 1.1 Proposed Federal Action (page 1-1 line 18).

*SUNSI Review Complete*  
*Template = ADM-013*

*E-REDS = ADM-03*  
*Call = C. Eccleston (CHEI)*

Finally, in regard to the conclusion that the potential impact of renewed operation on historic and archaeological resources at DAEC could be MODERATE, NextEra completed the development of a Cultural Resources Protection Plan and corresponding implementation procedures in December 2009. The plan was a collaborative effort with the State Historic Preservation Office (SHPO), a division of the State Historic Society of Iowa, and is on file with the Society. A copy of the plan has been provided to the NRC's License Renewal Project Manager (Environmental). As the NRC states on page 4-21 of the DSEIS, "[r]evised procedures and development of a cultural resources management plan would address potential impacts to both known and undiscovered resources." Given that a Cultural Resources Protection Plan has been implemented and is on file with the SHPO, implementing procedures are in effect, and no refurbishment activities are scheduled, the MODERATE impact finding is no longer warranted. A conclusion of a SMALL impact is more appropriate.

If you have any questions regarding these comments or require any additional information, please contact Mr. Herb Giorgio at (319) 851-7264.

Sincerely,



Christopher R. Costanzo  
Vice President, Duane Arnold Energy Center  
NextEra Energy Duane Arnold, LLC

Attachment 1: Comments on Draft SEIS for License Renewal of Duane Arnold Energy Center

cc: Administrator, Region III, USNRC  
Project Manager, DAEC, USNRC  
Senior Resident Inspector, DAEC, USNRC  
License Renewal Project Manager, USNRC  
License Renewal Inspection Team Lead, Region III, USNRC  
M. Rasmusson (Iowa Department of Public Health)

**Attachment 1 to NG 10-0205**  
**Comments on Draft SEIS for License Renewal of Duane Arnold Energy Center**

<b>Page</b>	<b>Line</b>	<b>Comment</b>	<b>Type</b>
v xv 1-1	2 3 18	The corporate name "FPL Energy Duane Arnold, LLC" was changed to "NextEra Energy Duane Arnold, LLC" in April 2009, several months after the license renewal application was filed. To avoid any confusion, we suggest that "FPL Energy Duane Arnold, LLC (FPL-DA)" be replaced with "NextEra Energy Duane Arnold, LLC, fka FPL Energy Duane Arnold, LLC (FPL-DA)" in the Abstract (page v line 2), Executive Summary (page xv line 3), and Section 1.1 Proposed Federal Action (page 1-1 line 18). The NRC may also consider making conforming changes to the remainder of the DSEIS.	Substantive
xviii 4-21 4-21 4-37	33-35 10-12 23-28 28-33	In December 2009, Duane Arnold completed the development of a Cultural Resources Protection Plan and corresponding implementation procedures. The plan was a collaborative effort with the State Historic Preservation Office (SHPO), a division of the State Historic Society of Iowa and is on file with the society. Given that a plan is in place and no refurbishment activities are scheduled, a conclusion of SMALL seems more appropriate.	Substantive
xx	Table I-1	This table needs to be reconciled against the prose in the introduction section, the tables in Section 8, the prose in Section 8 and the prose in Section 4. For example: 1) For DAEC License Renewal, Land Use is designated S to M in Table I-1 while the prose on page xvi lines 27-29 and page 4-1 lines 14-19 state SMALL. 2) The tables in Section 8 do not include the impact on Land Use for any of the alternatives as it is considered as a subset of Socioeconomic Impacts. 3) For the Combination Alternative, Socioeconomics is designated S to M, while the table on page 8-26 and supporting prose in Section 8-3 stipulate SMALL to LARGE.	Substantive
1-9 2-24 C-3	Table 1-2 36 TableC-2	With the exception of the NPDES permit and the one time dredging permits (PF07-015, 06-141and 07-175) all applicable permits have been renewed. In regard to the NPDES permit, Duane Arnold made a timely application for renewal and the application is under review by the Iowa Department of Natural Resources. Therefore, the permit issued July 2007 is valid.	Substantive
2-9	2 & 12	These sentences imply that Duane Arnold routinely solidifies liquid waste. This is inconsistent with the statement on page 2-8, lines 39-40 and with the Environmental Report. To the extent practical, liquid waste is purified and recycled. The sentence on line 2 should be reworded to say: "To the extent possible liquid waste is purified and recycled. If that is not feasible the liquid is evaporated and the sludge solidified." Similarly, the sentence on Line 12 should be reworded to say: "As indicated earlier, the liquid waste is purified and recycled, however..."	Substantive

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<b>Page</b>	<b>Line</b>	<b>Comment</b>	<b>Type</b>
2-12	24	The topic of mixed waste is contained in three subsections: 2.1.2.3 Radioactive Solid Waste (pg 2-10 lines 11-18); 2.1.2.4 Nonradioactive Hazardous Waste Streams (pg 2-12 lines 6-10); and 2.1.2.5 Mixed Waste (pg 2-12 lines 25-30). This makes it difficult to determine how mixed waste is handled at the plant. Significant information should be consolidated in section 2.1.2.5. If need be, the other sections could have pointer sentences referring to the Mixed Waste section.	Substantive
2-17	32, 33	Well water is used to cool many systems in the plant. Suggest wording this sentence as follows: "The DAEC relies on the Cedar River as its source of makeup water for its condenser cooling system, and it discharges various waste flows to the river."	Substantive
2-26	4, 6	The two references to "new" permit should be changed to "renewed".	Substantive
2-28	12	As currently written, this sentence implies the entire city was evacuated. That was not the case. Suggest replacing "The city of Cedar Rapids..." with "Portions of the city of Cedar Rapids..."	Substantive
2-33	32-33	Given that a squawfoot shell was found in the vicinity of DAEC in 2002, perhaps this should be worded more equivocally: "Although a dead squawfoot was found upstream of DAEC in 2002, no live specimens have been collected in recent years. "	Substantive
2-43	22	To be consistent with Table 2-6, this should be 89%.	Substantive
4-4	Table 4-4	"Altered Salinity" should not be included in this table as it is not applicable for Duane Arnold.	Substantive
4-36	32	The Supplemental Environmental Impact Statement should address the impact on Iowa not Nebraska. If this is a typo merely change, otherwise the CDC's records for Iowa should be examined.	Substantive
5-7	26	Should read "SAMA 117 - Increase boron concentration or enrichment in the SLC system." Enriching the B-10 is what is being examined in more detail.	Substantive
6-1	25	Should refer to FPL-DA not NPPD.	Substantive
6-11	19-20	Delete this reference. Add FPL Energy Duane Arnold's Environmental Report as a reference.	Substantive
8-2	Side Box	The alternatives listed in the box are not consistent with those listed in Section 8.4. Methane and Wind are included in the box, but are not included in Section 8.4 Conversely, Offsite Coal and Gas Fired Capacity is addressed in Section 8.4.1 but not included in the box.	Substantive
8-2	14	Depending on the disposition of the comment regarding the box on this page, 17 may or may not be the appropriate number of discreet alternatives considered.	Substantive
8-5 8-17 8-26	Tables 8-1, 8-2, 8-3 and 8-4	These tables, and their corresponding prose, have Land Use as a subset of Socioeconomic. On page xx Table I -1, Land Use is considered on its own.	Substantive

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<b>Page</b>	<b>Line</b>	<b>Comment</b>	<b>Type</b>
8-9	23-30	This is inconsistent with the conclusion of SMALL to MODERATE on page 4-6 lines 9-13. Both the new coal plant and continued operation of the DAEC will consume about 11 million gallons of river water a day. The impact on surface water use should be the same.	Substantive
8-37	31	Consider revising this analysis to reflect Iowa instead of Nebraska.	Substantive
8-45	Table 8-5 vs 8-3	For Combination Alternative, Socioeconomics is designated SMALL to MODERATE. This does not match the SMALL to LARGE designation on Table 8-3 (page 8-26) nor the prose in Section 8-3.	Substantive
F-11	Table G-4	The last descriptive case is a repeat of the second to the last case. It should be removed, and the core damage frequency for "Others" changed to 3.1 E-07.	Substantive
F-23	26 30	\$14,000 should be \$8,000 as the external events accounts for 36% of the total ( 0.57/1.57). $\$23,000 \times 36\% = \$8,000$ . Similarly, \$140,000 should be \$80,000.	Substantive
xvii	3	Change "...are a Category 2..." to "...is a Category 2..."	Editorial
1-7	9	This should be the Iowa State Archaeologist	Editorial
2-13 xxv 4-8	27 5 23	Delete "Information Technology Council". The name of the company is ITC Midwest LLC. ITC is neither an abbreviation nor an acronym.	Editorial
2-14	7 & 14	"...500-foot (153-m)..." should be "...665-foot (203-m)..."	Editorial
2-14	10 & 17	"...665-foot (203-m)..." should be "...500-foot (153-m)..."	Editorial
2-14	13	"...Hills substation feed..." should be "...Hazelton substation feed..."	Editorial
2-17	7-8	The sentence "Water that is lost through cooling tower evaporation... is termed 'makeup' water" is confusing. The lost water isn't called makeup water. Water used to replenish these losses is called makeup water. Suggest the sentence be reworded to: "Water which is replenished due to losses through cooling tower evaporation ... 'makeup' water."	Editorial
2-19	22	Replace (47,602,000 m3) with (3.2 km).	Editorial
2-22	15	Replace "...northwest from DAEC." to "...southeast from DAEC."	Editorial
2-24	3	Change "...near the reactor." to "...near the reactor building."	Editorial
2-24	11	The word "levy" should be "levee".	Editorial
2-25	3-5	Suggest adding a sentence referring to Table 2-3 for the intended use of the chemicals.	Editorial
2-29	5	As mussels are no longer an important source of food for Native Americans, change "...mussels are historically..." to "...mussels were historically..."	Editorial
2-29	31	There are several small populations of mussels in the area. Suggest the term "population" be replaced with "community".	Editorial
2-30	25	Ecological Analysts (1984) don't report the total number of fish collected over the five-year period, just the number of species collected each year. They do, however, report the number of fish collected in 1983 --- 1,387. See p. 2.2-3 of DAEC LR ER.	Editorial

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2-31	16	Box elder is <i>Acer negundo</i> , not <i>negunde</i>	Editorial
2-31	22	Two species of meadowlarks are observed. Change "...meadowlark..." to "...meadowlarks..."	Editorial
2-31	23	Change "...red-wing blackbirds..." to "...red-winged blackbirds..."	Editorial
2-33	4	If possible, please provide particulars on recovery efforts (how far downstream?).	Editorial
2-33	6	The text regarding downstream recovery efforts is redundant to that the text on line 4 of this page.	Editorial
2-33	27	"Cyprinids" and "Ictalurids" shouldn't be italicized.	Editorial
2-33	29	The common name is "river otter" and the scientific name is <i>Lutra canadensis</i> .	Editorial
2-34	Table 2-4	The scientific name for squawfoot is <i>Strophitus undulatus</i> .	Editorial
2-38	Table 2-5	The scientific name for prince's pine is <i>Chimaphila umbellata</i>	Editorial
2-41	3	Duane Arnold schedules refueling outages at 18 to 24 month intervals.	Editorial
2-42	15	"...(gallons per day)..." should be "...(million gallons per day)..."	Editorial
2-50	15	This line indicates there are 74 properties in Linn County that are listed on the National Register of Historic Places. The ER indicates that there are 75 properties. (ER page 2.11-3 second ¶).	Editorial
4-6	Table 4-5	"Stimulation of nuisance organisms" should be included in this table (GEIS reference 4.2.2.1.11, Category 1)	Editorial
4-6	12	"...impact on groundwater..." should be "...impact on surface water..."	Editorial
4-10	28 & 36	Rem and rad are no longer considered to be acronyms. They are just special units of dose equivalent and absorbed dose, respectively.	Editorial
4-13	40	Biannually can mean either once every two years or twice a year. To avoid confusion the term biennially should be used.	Editorial
4-14	13	EMF is defined as electromagnetic force on line 13, but used as electromagnetic field on line 29.	Editorial
4-21	29-36	This is a repeat of lines 5-12 on the same page.	Editorial
4-22	1-14	This is a repeat of lines 17-28 on page 4-21.	Editorial
4-29	16	Change "...or lower levels..." to "...or lower..."	Editorial
4-36	32	Nebraska should be Iowa.	Editorial
4-37	15	Lynn should be Linn.	Editorial
5-1ff.		There are multiple references to Appendix G, which should be Appendix F.	Editorial
5-5	6	For consistency, we suggest providing the dose calculations in rem first, followed by sieverts.	Editorial
6-1	2	Solid waste management is only mentioned in the title of the section. Should there be more information in the section?	Editorial
8-2	41	Biological is referred to as Terrestrial and Aquatic Resources in subsequent sections. This could cause some confusion.	Editorial

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<b>Page</b>	<b>Line</b>	<b>Comment</b>	<b>Type</b>
8-5 8-17 8-26	Tables 8-1 & 8-2	For Continued DAEC Operation, Groundwater is categorized as SMALL to MODERATE. The text in Section 4.3 concludes that the impact is SMALL.	Editorial
8-5 8-17 8-26	Tables 8-1 & 8-2	For Continued DAEC Operation, Surface Water is categorized as SMALL. The text in Section 4.4 conclude that the impact is SMALL to MODERATE.	Editorial
8-23	38	"...coal-fired alternative ..." should be "... gas-fired alternative..."	Editorial
8-46	9	Should this be referencing an Iowa site rather than a Nebraska site?	Editorial
8-36	3-11	This paragraph indicates that "...FPL-DA indicated that it is unlikely that a nuclear alternative could be sited, constructed and operational by the time DAEC operating license expires in February of 2014." Although FPL-DA did not make the statement, and analyzed the potential impacts of constructing a new nuclear facility at the DAEC site, we do agree that it would be unlikely that a new reactor could be on line before the expiration of the current operating license.	Editorial
Chapter 8		NRC did not use the analysis prepared by FPL-DA for input to the alternatives analysis in the DEIS. Consequently, the various numbers cited for coal- and gas-fired emissions, land use, waste, etc. differ from those presented in the ER. In general, the numerical values cited by NRC are larger than those presented in the ER and NRC conclusions based on those values indicate impacts from the various alternatives would be larger than those estimated by FPL-DA. The less conservative assumptions and conclusions in the DEIS support the case for license renewal.	Editorial
F-4	15	Most tables in this section are given a G- designation rather than an F- designation.	Editorial
F-34	4 line 7	Change "...loss of offsite peer risk..." to "...loss of offsite power risk..."	Editorial