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March 1, 2010

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Subject: Duke Energy Ohio, LLC.
Southern Ohio Clean Energy Park
Response to RIS 2010-01
Ltr # MWG2010.03-01

Reference: NRC Regulatory Information Summary 2010-01, *Process for Scheduling Acceptance Reviews of New Reactor Licensing Applications and Process for Determining Budget Needs for Fiscal Year 2012*, dated February 3, 2010.

The referenced document was issued by the Nuclear Regulatory Commission (NRC) Staff, in part, to "assist the NRC in determining fiscal year (FY) 2012 resource and budget needs with respect to future construction-related activities and other anticipated 10 CFR Part 52 licensing actions." Regulatory Issue Summary (RIS) 2010-01 requested certain information from 10 CFR Part 52 applicants/licensees who anticipate potential licensing actions and related activities. The RIS also requested that potential applicants who previously projected a submission date beyond FY 2012 revisit estimated submission dates on an annual basis and inform the NRC, in writing, of the projected application submission dates.

Enclosed with this letter is the Duke Energy response to the referenced RIS. If you have any questions or need any additional information, please contact Chris Nolan, Nuclear Plant Development, Licensing Manager, at (704) 382-7426.

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Enclosure:

- 1) Duke Energy's Response to Regulatory Information Summary (RIS) 2010-01

xc (w/ enclosure):

Michael Johnson, Director, Office of New Reactors

David Matthews, Director, Division of New Reactor Licensing, NRO

Frank Akstulewicz, Deputy Director, Division of New Reactor Licensing, NRO

Scott Flanders, Director, Division of Site and Environmental Reviews, NRO

Luis Reyes, Regional Administrator, Region II

Loren Plisco, Deputy Regional Administrator, Region II

Background:

Duke Energy is exploring the option to develop new nuclear generation in its Midwest service territory. On June 12, 2009, Duke Energy announced the formation of the Southern Ohio Clean Energy Park Alliance (the Alliance). The Alliance brings together Duke Energy, AREVA, USEC Inc., UniStar Nuclear Energy and the Southern Ohio Diversification Initiative to promote and pursue the development of a Clean Energy Park demonstration project at the U.S. Department of Energy's (DOE) Piketon Site in Pike County, Ohio. The Alliance will focus on the development of licensing documents necessary to support the deployment of a Generation III+ reactor. Duke Energy Ohio, LLC will be the applicant, owner and operator of the proposed facility.

With the support of the Alliance, Duke Energy plans to develop an application for a technology neutral early site permit utilizing a plant parameter envelope (PPE). The PPE is expected to bound designs for pressurized water reactor (PWR) technologies that are currently under review by the NRC staff for design certification. Following the selection of a reactor technology, Duke Energy plans to pursue the development of a combined operating license (COL) application. The timing for the reactor technology selection and the development of a COL application has yet to be established.

Duke Energy plans to minimize the amount of new information introduced in a future COL application by selecting a mature reactor technology and referencing an ESP consistent with the 10 CFR Part 52 process.

Response to Requested Information:

NRC RIS 2010-01 requested information in four (4) separate areas. The NRC requests have been repeated below and paired with the associated Duke Energy response. This is Duke Energy's initial correspondence with NRC regarding the Southern Ohio Clean Energy Park. Duke Energy provided responses to all four (4) requests for completeness. Duke Energy recognizes that in the early stages of this project the response to NRC Request No. 1 provides the applicable information.

NRC Request No. 1:

The staff is seeking notification on the number and the degree of complexity of ESP, LWA, DC, and COL applications, and any other licensing requests that applicants expect to submit in FY2012, no later than 30 days from the date of this RIS. This information will assist the staff in determining FY 2012 budget needs.

Duke Energy Response:

Duke Energy plans to submit an ESP application to the NRC sometime between the 4th quarter of FY 2012 and the 2nd quarter of FY 2013. Resolution of the interface issues

between DOE and the Alliance are the primary drivers for the schedule uncertainty. Duke Energy may submit an LWA with the ESP. Duke Energy believes the proposed application would have moderate complexity based on the proximity of the proposed site to other NRC-licensed activities. Duke Energy recognizes that the proposal to develop an ESP application at a former weapons complex site introduces both opportunities and challenges. The continuing interface with DOE and USEC may introduce complexity and uncertainty that are not currently addressed in our plans and schedules.

NRC Request No. 2:

The staff is seeking notification of any changes to previously announced or submitted schedules concerning construction of power reactors under 10 CFR Part 52. In support of staffing and planning, this includes projected submission dates beyond FY 2012

Duke Energy Response:

This is Duke Energy's initial correspondence with NRC on the Southern Ohio Clean Energy Park. Duke Energy will inform NRC if there are future changes to its announced schedule.

NRC Request No. 3:

The staff requests that, 90 days before the expected submittal date, an applicant or licensee (as applicable) declare the expected submission date (month, day, and year) and the degree of complexity of each of its ESP, LWA, DC, and partial or complete COL applications or licensing action requests that it intends to submit to the NRC.

Duke Energy Response:

Duke Energy will provide NRC periodic information regarding the project schedule. Duke Energy is aware of the NRC's expectation for a 90 day advance declaration of the ESP application submission date (month, day, and year).

NRC Request No. 4:

The NRC staff is requesting the voluntary submission to the NRC of addressee construction plans and schedules for the fabrication of large components and modules, when available.

Duke Energy Response:

Duke Energy plans to develop a technology neutral ESP utilizing a PPE. Duke Energy will share information regarding construction plans and schedules with the NRC when the information is available.