

**Duke Energy Carolinas, LLC
Response to Department of Energy
Federal Loan Guarantee Application**

**PART I and II – SECTION A
Application Information
I-A-1 and II-A-1**

WLS/I/A/1 Project Name

A.I.1 Project Name: Assign a short project name for purposes of identification.

Response:

For purposes of complying with the Application Instructions provided in Attachment A1, Duke Energy Carolinas, LLC (also “the Company”) will refer to the William States Lee III Nuclear Station (also “Lee Nuclear Station”) as ‘WLS’ when naming and numbering data elements in each section of the application.

WLS/I/A/2/Evidence of Authority

A.I.2 Evidence of Authority: Submit evidence that the signatory of the application has full authority to bind the Project Sponsors to the commitments and representations made in the application and attests as to the accuracy of the information provided both written and oral in the application process and that binds the Project Sponsors.

Response:

The signatory of the Duke Energy Carolinas loan guarantee application is David L. Hauser, Group Executive and Chief Financial Officer of Duke Energy Carolinas, LLC. Per the policy documents included in Appendix 1, Mr. Hauser has the requisite authority to bind the company to the commitments and representations made in this application. Please see the documents entitled “Approval of Business Transactions”, “Financing Activity and Financial Risk Management Policy”, and “Creation, Dissolution, or Restructuring of Legal Entities and Subsidiaries”, in **Appendix 1, [File name: 10 Appendix 1 WLS/I/A/2.pdf]** for further information. Also included in Appendix 1 is the Board Resolution that discusses approval of “2009 Funding for Duke Energy Carolinas’ Lee Nuclear Station” in August 2008.

WLS/I/A/3/ Applicant Validation Statement

A.I.3 Applicant Validation Statement: Provide a written statement that based on the project information provided by the applicant for DOE consideration of issuance of a loan guarantee, the applicant hereby attests that there is a reasonable prospect that the guaranteed portion of the Guaranteed Obligation will be repaid on time and in full (including interest) from project cash flow according to the terms proposed in the application, as required by Section 609.6(b) (28) of the Final Regulations.

Response:

Based on the project information provided by Duke Energy Carolinas in Sections B, D, and E of this loan guarantee application, and as required by 10 CFR § 609.6(b)(28), Duke Energy Carolinas states that it believes there is a reasonable prospect that the guaranteed portion of the Guaranteed Obligation will be repaid on time and in full (including interest) from project cash flow.

WLS/I/A/4/ Eligible Lender/Holder Statement

A.I.4 Eligible Lender/Holder Statement: Provide a written affirmation from an officer of an eligible lender or other holders expressing commitment to provide or interest in providing the required debt financing necessary to construct and fully commission the project.

Response:

Duke Energy Carolinas intends to seek Federal Financing Bank funds for construction of the project; therefore, no third-party financing is currently contemplated. The Company may seek export credit and development bank financing for a portion of the project cost, but until more procurement sourcing decisions have been made, it is too early in the development process to determine the most appropriate source of such funding.

WLS/I/A/5/Equity Commitment Letters

A.I.5 Equity Commitment Letters: Provide a copy of the equity commitment letters from each project investor and a description of the sources of equity.

Response:

Duke Energy Carolinas currently intends to fund the required equity investment for the project using internally generated funds and corporate borrowings and, potentially, future equity issuance. The Company may seek joint-venture partners, but will not rely on third-party equity as a condition to proceeding with development and construction.

WLS/I/A/6 Project Participants

A.I.6 Project Participants: List the parties involved with the project, their function and contact information, including name of contact person (first, middle, and last), Position/Title, Phone Number, Fax Number, E-mail address, Street Address, City, State, 9 Digit Zip Code.

Response:

1. Name: Duke Energy Carolinas, LLC
Function: Overall Project Management
Point of Contact: Bryan J. Dolan
Phone: (704) 382-0605
Fax: (704) 382-4545
Email: BJDolan@duke-energy.com
Address:
526 South Church Street
Charlotte, North Carolina 28202-1803
2. Name: Westinghouse Electric Company, LLC
Function: Consortium Member & AP1000 Certified Design
Point of Contact: Richard S. Kusy
Phone: 412-374-4379
Fax: 412-374-56677
Email: kusyrs@westinghouse.com
Address:
4350 Northern Pike
Monroeville, PA 15146
3. Name: Shaw Nuclear Services, Inc.
Function: Engineering, Construction, Procurement and Startup Services
Point of contact: Charles Zappile
Phone: 609-932-9254
Fax: 704-378-5074
E-mail: charles.zappile@shawgrp.com
Address:
3 Executive Campus
Cherry Hill, NJ 08002-4103

In order to conform to the project financing model of the DOE Federal Loan Guarantee program, Duke Energy Carolinas intends to structure its Lee Nuclear Station project as a “Special Purpose Entity” (“SPE”). This entity has not yet been created, and is represented in the diagram included in WLS/I/B/4 as ~~WLS Nuclear Energy, LLC~~ “Newco”. Duke Energy Carolinas plans to work with state regulators and policymakers in North Carolina and South Carolina to ensure that appropriate regulatory frameworks exist that will permit the implementation of this SPE~~V~~ and

provide clarity as to the entity's transactions with its parent. At the time of formation of the SPEV, Duke Energy Carolinas intends to amend its DOE Federal Loan Guarantee Application with the appropriate SPEV as the new project sponsor.

WLS/I/A/7 Applicant Point of Contact Information

A.I.7 Applicant Point of Contact Information: Provide the mailing address of the applicant and phone, fax and e-mail address of the applicant's project point of contact for DOE.

Response:

Mailing address: P.O. Box 1006
Charlotte, N.C. 28201-1006
EC05Z

Project Point of Contact:

Mary Jo Brown
Phone: (704) 382-8870
FAX: (980) 373-9932
Email: mjbrown1@duke-energy.com

WLS/II/A/1 Changes/Additions to Part I Submission

A.II.1 Changes/Additions to Part I Submission: Provide a detailed description of all material amendments, modifications, and additions to the information provided in Part I of the application, including any changes in the proposed project's financing structure or other terms, the rationale for such changes and the expected impact on the project.

Response:

Duke Energy Carolinas is submitting a combined Part I and Part II Application in response to the DOE's June 30, 2008 solicitation for Nuclear Power Facilities (DE-PS01-08LG00002). The intent is to provide a stand alone document that satisfies all solicitation requirements. Some Part I responses remain unchanged from the initial submission on September 29, 2008. Part I responses that have been revised are blacklined and marked with a bar to the left to signify textual changes. Other Part I responses that have been completely subsumed by information provided in Part II direct the reviewer to the replacement response.

In general, the following information has been changed throughout the Part I narrative:

1. Part I references to a special purpose entity/vehicle (SPE/SPV) are revised to refer to a special purpose entity (SPE) named "Newco".
2. The timeframe for submitting a combined CPCN/Baseload review in South Carolina has changed from first quarter 2009 to first quarter 2010. The Need Determination in North Carolina will likewise move from second quarter 2009 to second quarter 2010. The timeline was also updated to reflect necessary FERC filings.
3. Similarly, the timing for signing an EPC contract has moved out approximately one year to early 2010 and will still occur prior to filing the combined CPCN/Baseload review in South Carolina.
4. Duke Energy Carolinas' 2008 Integrated Resource Plan filed with the North Carolina Utilities Commission and the Public Service Commission of South Carolina and attached to this Application as Appendix 16 continues to support the Company's efforts to preserve the proposed Lee Nuclear Station as an option to serve customers' needs in the 2018 timeframe.

These changes/additions, detailed below, have no effect on Lee Nuclear Station's proposed financing structure or scheduled Commercial Operation Dates (COD). The changes reflect adjustments made as a result of a better defined strategic direction for Lee Nuclear Station.

WLS/I/B/01/Executive Summary

Changes were made to the Lee Nuclear Station schedule to reflect refined dates for completing negotiations on the EPC Contract with a consortium of Westinghouse Electric Company and Shaw Group Inc. (WEC/Shaw) and for submitting the CPCN and baseload review to the Public Service Commission of South Carolina. A "Project Structure" section was added to describe the relationship between Duke Energy Carolinas and Newco, a yet-to-be-formed special purpose entity intended to own the station.

In addition, there is a discussion of the recently signed contract with the DOE for disposal of spent nuclear fuel for the Lee Nuclear Station and the recent organizational change that created a new role of former Duke Energy Carolinas President, Ellen Ruff as President, Office of Nuclear Development.

These revisions do not impact the projected Close on the Loan Guarantee or Lee Nuclear Station COD.

WLS/I/B/04/Organization

Organization changes were made to Duke Energy Carolinas to reflect the current organization. Brett Carter replaced Ellen Ruff as President, Duke Energy Carolinas. Ellen Ruff, in her new role as President, Office of Nuclear Development will work to further the development of new nuclear generation in the Carolinas, including advancing Duke Energy's plans for the proposed Lee Nuclear Station. In addition, she will integrate the company's nuclear development efforts and seek potential partners interested in regional generation.

WLS/I/B/06/Project Sponsors' Capabilities

This response, in its entirety, was replaced by WLS/II/D/3/Project Sponsors' Capabilities. The updated Part II response has no impact on Duke Energy Carolinas' Loan Guarantee Application proposed financing structure or Lee Nuclear Station COD.

WLS/I/B/09/Project Time Lines

Changes made to this section are consistent with those made in WLS/I/B/1/Executive Summary, detailed above.

Changes were made to the Lee Nuclear Station schedule to reflect refined dates for completing negotiations on the EPC Contract with a consortium of Westinghouse Electric Company and Shaw Group Inc. (WEC/Shaw) and for submitting the CPCN and baseload review to the Public Service Commission of South Carolina.

These revised dates do not impact the projected Close on the Loan Guarantee or Lee Nuclear Station COD.

WLS/I/B/11/List and Status of Licenses/Permits/Approvals

This response, in its entirety, was replaced by WLS/II/C/4/Permits and Approvals. The updated Part II response has no impact on Duke Energy Carolinas Loan Guarantee Application proposed financing structure or Lee Nuclear Station COD.

WLS/I/B/12/Detailed Total Project Cost

This response, in its entirety, is replaced by WLS/II/B/1/Detailed Total Cost. The updated Part II response has no impact on Duke Energy Carolinas Loan Guarantee Application proposed financing structure or Lee Nuclear Station COD.

WLS/I/C/01/Key Contracts and Agreements

Changes were made to the Lee Nuclear Station schedule to reflect refined dates for completing negotiations on the EPC Contract with a consortium of Westinghouse Electric Company and

Shaw Group Inc. (WEC/Shaw) and for submitting the CPCN and baseload review to the Public Service Commission of South Carolina. In conjunction with the EPC contract, Duke Energy Carolinas expects to agree on two other related agreements with WEC, a fuel supply agreement and a short-term maintenance and services agreement.

Additionally, the time frame for Long Lead Material purchase was revised to remove specific dates associated with the materials purchase and to reflect Duke Energy Carolinas intention to having materials purchased to support the 2018 COD.

WLS/I/C/02/Major Project Plans

This response, in its entirety, is replaced by WLS/II/C/1/Engineering and Construction Plans, WLS/II/C/2/Operating and Maintenance Plans, WLS/II/C/3/Decommissioning Plan and WLS/II/D/4/Contractual Arrangements. The updated Part II response has no impact on Duke Energy Carolinas' Loan Guarantee Application proposed financing structure or Lee Nuclear Station COD.

WLS/I/D/02/Summary Business Plan

This response, in its entirety, is replaced by WLS/II/D/Business Plan. The updated Part II response has no impact on Duke Energy Carolinas' Loan Guarantee Application proposed financing structure or Lee Nuclear Station COD.

WLS/I/E/03 Financial Statements

Response WLS/I/E/3 - Financial Statements, has been updated to reflect the inclusion of third quarter 10-Q's for Duke Energy Corporation and Duke Energy Carolinas, LLC, submitted as **Appendix 15a [File name: 25 Appendix 15a WLS/I/E/3 2008 Qtr3 Form 10Q.pdf]** and **Appendix 15b [File name: 26 Appendix 15b WLS/I/E/3 2008 Qtr3 Form 10Q.pdf]** respectively.

WLS/I/E/06 and associated Appendix 13 [File name: Lee Nuclear Project Model – Part I.xls]

This response, in its entirety, is replaced by WLS/II/D/1 Financial Analysis. The updated Part II response has no impact on Duke Energy Carolinas' Loan Guarantee Application proposed financing structure or Lee Nuclear Station COD.

An updated Duke Energy Carolinas' model, **Appendix 13 [File name: Lee Nuclear Project Model – Part II.xls]**, is provided to reflect the following:

1. A more complete set of GAAP financial statements (income statement, balance sheet, cash flow statement).
2. Refined treatment of post in-service capital additions to reflect full capitalization and depreciation.
3. Conversion of the PPA capacity payment revenues to a standard rate recovery trajectory (rather than a level annual amount), and correspondingly setting principal and interest payments to reflect a constant annual principal payment.
4. A higher equity return for the recovery of CWIP financing in rates during the construction period to better reflect project risk.

5. A 15% equity return during the commercial operation period to better reflect project risk and market conditions.
6. A refinement to the construction cost estimate to capture inflated construction cost dollars for 2009 correctly.
7. A refinement to construction period equity distributions to incorporate an annual setting of CWIP financing in rates.
8. Scheduling of refueling outages every 18th month after initial operation, and the calculation of annual capacity factors reflecting this outage cycle.
9. A refinement to variable O&M costs to capture the impact of outage months.
10. A higher level of capital additions beginning in the 20th year of operation.
11. A refinement to the nuclear fuel cost estimate.
12. Modification of the model to allow for sensitivity analyses related to:
 - a. Delays in commercial operation dates,
 - b. Increases in construction costs,
 - c. Changes in fixed and variable O&M cost escalations,
 - d. Changes in annual capacity factors,
 - e. Potential regulatory disallowances of capacity payments,
 - f. Level and non-level capacity payments,
 - g. Differing AFUDC rates during construction, and
 - h. Timing of the funding of debt upon COL approval.
13. Inclusion of an alternative monthly equity cash flow calculation assuming the sponsor posts collateral in lieu of funding reserves.
14. A refinement to the allocation of construction expenditures to MACRS property class.

WLS/II/A/2 List of Requirements

A.II.2 List of Requirements: Pursuant to Section 609.6(b)(27) of the Final Regulations, provide a list of all requirements contained in Part 609 under chapter II of title 10 of the Code of Federal Regulations and under this Solicitation and where in the application these requirements are addressed.

Response:

Please see the matrix provided below that cross references the list of requirements contained in Part 609 under chapter II of title 10 of the Code of Federal Regulations and under this Solicitation with the location of the required information in Duke Energy Carolinas Part I and/or II applications.

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
1) A completed Application form signed by an individual with full authority to bind the Applicant and the Project Sponsors	REFERENCE: Part I – Loan Guarantee Form as signed and dated on September 26, 2008 Part II – Loan Guarantee Form as signed and dated on December 18, 2008	
(2) Payment of the Application filing fee (First Fee) for the Pre-Application, if any, and Application phase	REFERENCE: Part I – Filing Fee (First Fee) for Pre-Application completed as a wire transfer on September 29, 2008 Part II – Filing Fee (Second Fee) for Part II complete as a wire transfer on December 19, 2008	
(3) A detailed description of all material amendments, modifications, and additions made to the information and documentation provided in the Pre-Application, if a Pre-Application was requested in the solicitation, including any changes in the proposed project's financing structure or other terms	REFERENCE: Part II – Application Section A(1) Changes/Additional to Part I Submission	
(4) A description of how and to what measurable extent the project avoids, reduces, or sequesters air pollutants and/or anthropogenic emissions of greenhouse gases, including how to measure and verify those benefits	REFERENCE: Part I – Project Description Section B(3)(a) Project Eligibility	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
<p>(5) A description of the nature and scope of the proposed project, including:</p> <ul style="list-style-type: none"> (i) Key milestones; (ii) Location of the project; (iii) Identification and commercial feasibility of the new or significantly improved technology(ies) to be employed in the project; (iv) How the Applicant intends to employ such technology(ies) in the project; and (v) How the Applicant intends to assure, to the extent possible, the further commercial availability of the technology(ies) in the United States 	<p>REFERENCE:</p> <ul style="list-style-type: none"> (i) Part I – Project Description Section B(5) Prior Experience (ii) Part I Project Description Section B(7) Proposed Project Location (iii) Part I Project Description Section B(2) Technology Description (iv) Part I Project Description Section B(3)(b) Project Eligibility (v) Part I Project Description Section B(2) Technology Description 	
<p>6) A detailed explanation of how the proposed project qualifies as an Eligible Project</p>	<p>REFERENCE: Part I – Project Description Section B(3) Project Eligibility</p>	
<p>(7) A detailed estimate of the total Project Costs together with a description of the methodology and assumptions used</p>	<p>REFERENCE: Part II – Project Description Section B(1) Detailed Total Cost</p>	
<p>(8) A detailed description of the engineering and design contractor(s), construction contractor(s), equipment supplier(s), and construction schedules for the project, including major activity and cost milestones as well as the performance guarantees, performance bonds, liquidated damages provisions, and equipment warranties to be provided</p>	<p>REFERENCE: Part II – Technical Information Section C(1) Engineering and Construction Plans</p>	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
(9) A detailed description of the operations and maintenance provider(s), the plant operating plan, estimated staffing requirements, parts inventory, major maintenance schedule, estimated annual downtime, and performance guarantees and related liquidated damage provisions, if any	REFERENCE: Part I – Technical Information Section C(1)(d) Operations and Maintenance (O&M) Contracts Part I – Technical Information Section C(2)(b) O&M Plan Part II – Technical Information Section C(2) Operating and Maintenance Plans	
(10) A description of the management plan of operations to be employed in carrying out the project, and information concerning the management experience of each officer or key person associated with the project	REFERENCE: Part II – Business Plan Section D(5) Management Plan	
(11) A detailed description of the project decommissioning, deconstruction, and disposal plan, and the anticipated costs associated therewith	REFERENCE: Part II – Technical Information Section C(3) Decommissioning Plan	
(12) An analysis of the market for any product to be produced by the project, including relevant economics justifying the analysis, and copies of any contractual agreements for the sale of these products or assurance of the revenues to be generated from sale of these products	REFERENCE: Part II – Business Plan Section D(2) Market Analysis	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
(13) A detailed description of the overall financial plan for the proposed project, including all sources and uses of funding, equity and debt, and the liability of parties associated with the project over the term of the Loan Guarantee Agreement	REFERENCE: Part II – Business Plan Section D(1) Financial Analysis	
(14) A copy of all material agreements, whether entered into or proposed, relevant to the investment, design, engineering, financing, construction, startup commissioning, shakedown, operations and maintenance of the project	REFERENCE: Part I – Technical Information Section C(1) Key Contracts and Agreements Part II – Business Plan Section D(4) Contractual Arrangements	
(15) A copy of the financial closing checklist for the equity and debt to the extent available	REFERENCE: Part II – Financing Plan Section E (3) Closing Checklist to be provided as soon as it is available	
(16) Applicant's business plan on which the project is based and Applicant's financial model presenting project pro forma statements for the proposed term of the Guaranteed Obligations including income statements, balance sheets, and cash flows. All such information and data must include assumptions made in their preparation and the range of revenue, operating cost, and credit assumptions considered	REFERENCE: Part II – Business Plan Section D(1) Financial Analysis and enhanced Financial Model file as Exhibit 13 – Lee Nuclear Project Model – Part II.xls.	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
(17) Financial statements for the past three years, or less if the Applicant has been in operation less than three years, that have been audited by an independent certified public accountant, including all associated notes, as well as interim financial statements and notes for the current fiscal year, of Applicant and parties providing Applicant's financial backing, together with business and financial interests of controlling or commonly controlled organizations or persons, including parent, subsidiary and other affiliated corporations or partners of the Applicant	REFERENCE: Part I – Financial Plan Section E(3) Financial Statements Part II – Business Plan Section D(7) Progress Reports to be provided	
(18) A copy of all legal opinions, and other material reports, analyses, and reviews related to the project	REFERENCE: Part II – Project Description Section B (2) Legal Opinions/Material Reports	
(19) An independent engineering report prepared by an engineer with experience in the industry and familiarity with similar projects. The report should address: the project's siting and permitting, engineering and design, contractual requirements, environmental compliance, testing and commissioning and operations and maintenance	REFERENCE: Part II – Technical Information Section C (5) Engineer's Report	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
(20) Credit history of the Applicant and, if appropriate, any party who owns or controls, by itself and/or through individuals in common or affiliated business entities, a five percent or greater interest in the project or the Applicant	REFERENCE: Part I – Financial Plan Section E(4) Credit History	
21) A preliminary credit assessment for the project without a loan guarantee from a nationally recognized rating agency for projects where the estimated total Project Costs exceed \$25 million. For projects where the total estimated Project Costs are less than \$25 million and where conditions justify, in the sole discretion of the Secretary, DOE may require such an assessment	REFERENCE: Part II - Financing Plan Section E(6) Preliminary Credit Assessment	
(22) A list showing the status of and estimated completion date of Applicant’s required project-related applications or approvals for Federal, state, and local permits and authorizations to site, construct, and operate the project	REFERENCE: Part II – Technical Information Section C(4) Permits and Approvals	
(23) A report containing an analysis of the potential environmental impacts of the project that will enable DOE to assess whether the project will comply with all applicable environmental requirements, and that will enable DOE to undertake and complete any necessary reviews under the National Environmental Policy Act of 1969	REFERENCE: Appendix 14 – Environmental Report referred to in: Part I – Technical Information Section C(3) Potential Environmental Impacts and Part II – Technical Information Section C(6) Environmental Report	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
(24) A listing and description of assets associated, or to be associated, with the project and any other asset that will serve as collateral for the Guaranteed Obligations, including appropriate data as to the value of the assets and the useful life of any physical assets. With respect to real property assets listed, an appraisal that is consistent with the "Uniform Standards of Professional Appraisal Practice," promulgated by the Appraisal Standards Board of the Appraisal Foundation, and performed by licensed or certified appraisers, is required;	REFERENCE: Part II – Financing Plan Section E(5) Collateral	
(25) An analysis demonstrating that, at the time of the Application, there is a reasonable prospect that Borrower will be able to repay the Guaranteed Obligations (including interest) according to their terms, and a complete description of the operational and financial assumptions and methodologies on which this demonstration is based;	REFERENCE: Part II –Business Plan - Section D	
(26) Written affirmation from an officer of the Eligible Lender or other Holder confirming that it is in good standing with DOE's and other Federal agencies' loan guarantee programs;	REFERENCE: Part I – Application Information Section A(4) Eligible Lender/Holder Statement Part II – Financing Plan Section E(7) Eligible Lender or Holder Statement	

609.6 Submission of Applications (b) An Application must include, at a minimum, the following information and materials	Applicable Section(s) of Part I and/or Part II	Notes
(27) A list of all of the requirements contained in this part and the solicitation and where in the Application these requirements are addressed;	Part II – Response A2	
(28) A statement from the Applicant that it believes that there is “reasonable prospect” that the Guaranteed Obligations will be fully paid from project revenue	REFERENCE: Part I – Application Information Section A(3) Application Validation Statement Part II – Business Plan Section D Conclusion of Business Plan	
(29) Any other information requested in the invitation to submit an Application or requests from DOE in order to clarify an Application	Duke Energy Carolinas agrees to supply additional information requested by the DOE	

