Healthy People. Healthy Communities.

September 24, 2019

Mr. Joshua C. Grubbs
Technical Services Coordinator
Energy*Solutions,* LLC
740 Osborn Road
Barnwell, SC 29812

Dear Mr. Grubbs:

This refers to your letter dated September 19, 2019, concerning your request to amend your South Carolina Radioactive Material License No. 287-02 to identify Jerry Flett as an Authorized User. Enclosed is Amendment No. 41 which incorporates your request as stated in Condition 11 of the license.

As provided by the Administrative Appeals Act, you have an opportunity to request a hearing to contest this action. The procedure is described in the enclosed document entitled *Guide to Board Review.*

Please review the amendment and if you have any questions or require further information, please contact our office at (803) 898-0493.

Sincerely,

Lynne Garner

Lynne D. Garner, Manager
Infectious & Radioactive Waste Management
Division of Waste Management
Bureau of Land and Waste Management

Enclosure

License 287-02, Amendment No. 41
Guide to Board Review

LC-092-19-JG/BC-091919-118

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
RADIOACTIVE MATERIAL LICENSE

Pursuant to the Atomic Energy and Radiation Control Act, Section 13-7-40 et.seq. of S.C. Code of Laws of 1976, as amended, and Supplements thereto, and the South Carolina Department of Health and Environmental Control Regulation 61-63, Radioactive Material (Title A), and in reliance on statements and representations heretofore made by the applicant, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the South Carolina Department of Health and Environmental Control now or hereafter in effect and to any conditions specified below:

Amendment No. 41 amends:

LICENSEE

1. Name: Energy*Solutions*,LLC
Nuclear Services Support Facility

3. License Number:
287-02 in its entirety.

2. Address: 740 Osborn Road
Barnwell, South Carolina 29812

4. Expiration Date:
April 30, 2020

5. Radioactive Material (Element & Mass No.)	6. Chemical and/or Physical Form	7. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.
A. Any radioactive material with Atomic Nos. 1-92 inclusive.	**A.** Any Form	**A.** 10.0 curies total of all radionuclides.
B. Any radioactive material with Atomic Nos. 93 and above.	**B.** Any Form	**B.** 10.0 millicuries total of all radionuclides.
C. Any radioactive material inclusive.	**C.** Any Form	**C.** 5,000 curies total of with Atomic Nos. 1-92.
D. Source material	**D.** Any Form	**D.** 1,000 pounds total.
E. Any radioactive material with Atomic Nos. 93 and above (except SNM)	**E.** Any Form	**E.** 100 grams total.
F. Special Nuclear Materials	**F.** Any form	**F.** 100 grams total.

8. Authorized Use:

A. Radioactive materials as contamination consisting of activation, corrosion and/or fission products upon surfaces or contained within tools, equipment, or components used in the maintenance, repair, testing, decontamination and waste processing functions of the Nuclear Services Support Facility.

B. Radioactive materials as incidental contamination on the surfaces or within tools, equipment, or components used in the maintenance, repair, testing, decontamination and waste processing functions of the Nuclear Services Division.

C&D. Radioactive materials and/or radioactive waste for receipt, processing, decontamination, storage, consolidation, solidification, encapsulation, and repackaging for transport to authorized licenses.

E&F. Radioactive material only incident to the radioactive materials of Item C.&.D.

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Supplementary Sheet

License No:287-02
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CONDITIONS

9. Radioactive material may be used at the licensee's site on Osborn Road, Barnwell, South Carolina.

10. The licensee shall comply with the provisions of Title A, State of South Carolina Rules and Regulations for Radiation Control, Part I - General Provisions; Part III - Standards for Protection Against Radiation; Part VI - Notices, Instructions, and Reports to Workers; Inspections; and Part XII - Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.

11. Radioactive material shall be used by or under the supervision of Clifford E. Bowers (RSO), Robert W. Defrenn, Billy L. Carver, Hendrick B. Fisher, Daniel B. Morris, John F. Davis, Jerry Flett or other individuals designated by the Radiation Safety Officer upon successful completion of the licensee's training program and approved by the licensee's Safety Review Board.

The licensee shall maintain continuity in the radiation control program by prior notification to the Department of any intended changes in the position of (Facility) Radiation Safety Officer or personnel contracted to perform and supervise any licensed activities. In the event of a change in the status of the current (Facility) Radiation Safety Officer, if prior contingencies have not been provided for interim supervision of licensed activities, suspension of activities authorized by this license shall be affected pending review and approval by the Department of submitted documentation regarding qualifications of candidates proposed to perform and supervise licensed activities.

12. The transportation of radioactive materials and radioactive waste within the State of South Carolina shall be in accordance with applicable regulations of the U.S. Department of Transportation, the U.S. Nuclear Regulatory Commission, Section RHA 2.22, and Appendix D, RHA 3.55, Department Regulation 61-63, Radioactive Material (Title A), and Department Regulation 61-83, Transportation of Radioactive Waste Into or Within South Carolina.

13. Radioactive waste shall be processed and packaged in accordance with applicable licenses issued by the U.S. Nuclear Regulatory Commission or an Agreement State to which radioactive material or waste will be transferred.

14. All operations authorized by this license shall be conducted in accordance with Chem-Nuclear Systems/Energy*Solutions* (ES) procedures, subsequent revisions, and additions approved by the Department. However, the licensee may, upon notification to the Department but without Department approval, make minor changes to these procedures provided that:

A. The change does not affect requirements of any other license condition within this license;

B. The change does not increase the potential for personnel exposures;

C. The change does not diminish operational safety;

D. The change does not increase the potential for release of radioactive material to unrestricted areas; and

E. The change does not reduce the licensee's record keeping and reporting system.

The licensee shall maintain records of these minor changes including evaluations which provide the basis for each change. The licensee shall provide a copy of all revised procedures to the Department within 30 days.

15. The licensee must comply with the reporting requirements for transactions involving nationally tracked sources in Title A, Part 3, Appendix G, RHA 3.58. This section includes the requirement to report any manufacture, transfer, receipt, disassembly, or disposal of a nationally tracked source, otherwise allowed by this license, by the close of the next business day after the transaction. A nationally tracked source, as defined in Title A, RHA 3.2.63, refers to a sealed source containing a quantity equal to or greater than Category 1 or Category 2 levels of any radioactive material listed in Title A, Part 3, Appendix G, RHA 3.58, "Nationally Tracked Source Thresholds."

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16. The licensee shall, to the extent necessary, continue the employment of all personnel involved in the operation of the Nuclear Services Support Facility in accordance with all requirements of the license and applicable regulations and, in the event replacement of employees becomes necessary, only individuals of comparable qualifications and experience will be hired.

17. The licensee shall make no changes in the personnel training program, the internal safety audits, Safety Review Board, ALARA Review Committee, Site Criteria, or Procedures Manual and Standard Operating Procedures, without written approval from the Department, unless otherwise specified in this license.

18. The licensee shall not accept radioactive waste for storage or processing unless the shipper has provided for the waste shipment on a Barnwell Waste Management Facility's Uniform Low-Level Radioactive Waste Manifest form. The Department thereto shall approve such form or revisions.

19. The licensee shall not accept radioactive waste for storage or processing unless the shipper of such waste has a valid, unsuspended Radioactive Waste Transport Permit issued by the S.C. Department of Health and Environmental Control unless exempted by the Department.

20. The licensee shall not accept radioactive waste for storage or processing unless the shipper has provided a properly executed Department Form, DHEC-803, Radioactive Waste Shipment Certification form, Parts I and II. A properly completed and executed Department Form, DHEC-802, Radioactive Waste Shipment Prior Notification and Manifest Form shall also accompany shipments consisting of more than 75 cubic feet or containing more than one (1) curie.

21. Notwithstanding other conditions of this license, the licensee shall not accept radioactive waste for storage or processing unless he has received advance written notification of any waste shipment containing unusual hazards or potential hazards including but not limited to, physical, gaseous, chemical, pyrophoric, or excessive
removable contamination on containers shipped inside casks or excessive internally contaminated casks, and unexpected high radiation levels at container surfaces.

22. The licensee shall immediately notify the Department of any waste shipments where a violation of applicable regulations or license conditions has been found.

23. The licensee shall notify the shipper and the Department when any shipment of radioactive waste or part of a shipment has not arrived within 60 days after the advance copy of the shipment manifest or shipping papers was received by the licensee.

24. The licensee shall notify the shipper when it has been determined that a radioactive waste shipment or part of a shipment cannot be accepted for processing by the licensee.

25. The licensee shall acknowledge receipt of the waste within 7 days of its acceptance for processing by returning a signed copy of the shipment manifest or shipping papers to the shipper. The licensee shall indicate on the returned copy of the shipment manifest of shipping papers any discrepancy between waste descriptions listed on the manifest or papers and the waste materials received in the shipment.

26. The licensee shall not possess any waste package containing licensed material for more than one year from the date of receipt of the package.

27. The licensee shall notify the Department in writing sixty (60) days in advance of plans to discontinue the activities authorized by this license.

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28. The licensee shall conduct a physical inventory every six (6) months to account for all radioactive material received and possessed to include the quantities and kinds of licensed material, location of radioactive materials, and the date of the inventory. Records of such inventories shall be maintained for inspection by the Department.

29. A. Unless otherwise authorized, the licensee shall not receive for storage nor processing, any mixed low-level radioactive waste defined as waste that satisfies the definition of low-level radioactive waste specified in the Low-Level Radioactive Waste Policy Amendments Act of 1985 (P.L. 99-240), and contains waste that either (1) is listed as hazardous waste in Subpart D, 40 CFR 261, or (2) causes the waste to exhibit any of the hazardous waste characteristics identified in Subpart C, 40 CFR Part 261.

B. The licensee may however, receive waste that has been treated by acceptable methods to render it non-hazardous and therefore not subject to the jurisdiction of the Resource Conservation and Recovery Act (RCRA). Waste, which may contain discrete quantities of hazardous or toxic materials, may be evaluated for processing by the licensee and such evaluations provided to the Department for consideration of approval.

30. Except as specifically provided otherwise, the licensee shall possess and use radioactive material described in Items 5, 6, and 7 of this license in accordance with statements, representations, and procedures contained in renewal application dated March 4, 2015, signed by Joseph J. Still, Radiation Safety Officer and Robert W. DeFrenn, Product Operations Manager.

For the South Carolina Department
Of Health and Environmental Control

Date of Issuance: September 24, 2019

By: Stacey French

Stacey French, PE, Director
Division of Waste Management
Bureau of Land & Waste Management

South Carolina Board of Health and Environmental Control
Guide to Board Review
Pursuant to S.C. Code Ann. § 44-1-60

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of $100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation or settlement discussions during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference. In matters pertaining to decisions under the South Carolina Mining Act, appeals should be made to the South Carolina Mining Council.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR) and the required filing fee of one hundred dollars ($100) must be received by Clerk of the Board within fifteen (15) calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after 5:00 p.m.
2. RFRs shall be in writing and should include, at a minimum, the following information:
   - The grounds for amending, modifying, or rescinding the staff decision;
   - a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
   - the relief requested; and
   - a copy of the decision for which review is requested.
3. RFRs should be filed in person or by mail at the following address:

   South Carolina Board of Health and Environmental Control
   Attention: Clerk of the Board
   2600 Bull Street
   Columbia, South Carolina 29201

   Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).

4. The filing fee may be paid by cash, check or credit card and must be received by the 15th day.
5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or (2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.
6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor. All personal and financial identifying information will be redacted from the RFR and accompanying documentation before the RFR is released to the Board, Department staff or the public.
7. If an RFR pertains to an emergency order, the Clerk will, upon receipt, immediately provide a copy of the RFR to all Board members. The Chairman, or in his or her absence, the Vice-Chairman shall based on the circumstances, decide whether to refer the RFR to the RFR Committee for expedited review or to decline in writing to schedule a Final Review Conference. If the Chairman or Vice-Chairman determines review by the RFR Committee is appropriate, the Clerk will forward a copy of the RFR to Department staff and Office of General Counsel. A Department response and RFR Committee review will be provided on an expedited schedule defined by the Chairman or Vice-Chairman.
8. The Clerk will email the RFR to staff and Office of General Counsel and request a Department Response within eight (8) working days. Upon receipt of the Department Response, the Clerk will forward the RFR and Department Response to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within a twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will

respond to the Clerk's email within forty-eight (48) hours and will request further review. If no Board member requests further review of the RFR within the forty-eight (48) hour period, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Final Review Conference. Contested case guidance will be included within the letter.
NOTE: If the time periods described above end on a weekend or State holiday, the time is automatically extended to 5:00 p.m. on the next business day.

9. If the RFR is to be considered by the RFR Committee, the Clerk will notify the Presiding Member of the RFR Committee and the Chairman that further review is requested by the Board. RFR Committee meetings are open to the public and will be public noticed at least 24 hours in advance.
10. Following RFR Committee or Board consideration of the RFR, if it is determined no Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Conference. Contested case guidance will be included within the letter.

II. Final Review Conference Scheduling

1. If a Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, informing the Requestor of the determination.
2. The Clerk will request Department staff provide the Administrative Record.
3. The Clerk will send Notice of Final Review Conference to the parties at least ten (10) days before the Conference. The Conference will be publically noticed and should:
    - include the place, date and time of the Conference;
    - state the presentation times allowed in the Conference;
    - state evidence may be presented at the Conference;
    - if the conference will be held by committee, include a copy of the Chairman's order appointing the committee; and
    - inform the Requestor of his or her right to request a transcript of the proceedings of the Conference prepared at Requestor's expense.
4. If a party requests a transcript of the proceedings of the Conference and agrees to pay all related costs in writing, including costs for the transcript, the Clerk will schedule a court reporter for the Conference.

III. Final Review Conference and Decision

1. The order of presentation in the Conference will, subject to the presiding officer's discretion, be as follows:
    - Department staff will provide an overview of the staff decision and the applicable law to include [10 minutes]:
        - Type of decision (permit, enforcement, etc.) and description of the program.
        - Parties
        - Description of facility/site
        - Applicable statutes and regulations
        - Decision and materials relied upon in the administrative record to support the staff decision.
    - Requestor(s) will state the reasons for protesting the staff decision and may provide evidence to support amending, modifying, or rescinding the staff decision. [15 minutes] *NOTE: The burden of proof is on the Requestor(s)*
    - Rebuttal by Department staff [15 minutes]
    - Rebuttal by Requestor(s) [10 minutes]
      Note: Times noted in brackets are for information only and are superseded by times stated in the Notice of Final Review Conference or by the presiding officer.
2. Parties may present evidence during the conference; however, the rules of evidence do not apply.
3. At any time during the conference, the officers conducting the Conference may request additional information and may question the Requestor, the staff, and anyone else providing information at the Conference.
4. The presiding officer, in his or her sole discretion, may allow additional time for presentations and may impose time limits on the Conference.
5. All Conferences are open to the public.
6. The officers may deliberate in closed session.
7. The officers may announce the decision at the conclusion of the Conference or it may be reserved for consideration.
8. The Clerk will mail the written final agency decision (FAD) to parties within 30 days after the Conference. The written decision must explain the basis for the decision and inform the parties of their right to request a contested case hearing before the Administrative Law Court or in matters pertaining to decisions under the South Carolina Mining Act, to request a hearing before the South Carolina Mining Council.. The FAD will be sent by certified mail, return receipt requested.
9. Communications may also be sent by electronic mail, in addition to the forms stated herein, when electronic mail addresses are provided to the Clerk.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.