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June 18, 2021

Ms. Deborah Ogilvie
Senior Public Affairs Professional
Chem-Nuclear Systems, LLC
740 Osborn Road Barnwell, SC 29812

Re: Rate Schedules and Annual Adjustments – FY 2021-2022

Dear Deborah:

Attached are the approved Maximum Uniform Rate Schedule and Alternative Rate Schedule for FY 2021-2022. Pursuant to Section 48-46-40(A)(4), South Carolina Code of Laws, the Office of Regulatory Staff must adjust the Maximum Uniform Rate Schedule for Atlantic Compact waste generators each year in accordance with the most recently published Producer Price Index (PPI) available in March. The Alternative Rate Schedule represents the result of negotiations between Chem-Nuclear and Atlantic Compact utilities.

Pursuant to the Memorandum of Understanding, signed June 30, 2009 and approved by the Budget and Control Board, regarding pricing and operational costs, the maximum amount of yearly disbursements from the Barnwell Decommissioning Trust Fund and/or the Barnwell Extended Care Fund shall be adjusted each year in accordance with the Producer Price Index (PPI) to cover "Institutional Costs" of the disposal facility and its surroundings. Under the North American Industry Classification System (NAICS), Industry Grouping 325 (chemical manufacturing) of the "net output for selected industries and industry groups" is used as the basis for the annual adjustment of the Maximum Uniform Rate Schedule. ORS has made the adjustments to the Maximum Uniform Rate Schedule, which will be applicable for Fiscal Year 2021-2022. The most recent data from the Bureau of Labor Statistics is the February 2021 Index. The PPI shows an **increase of 3.7 percent** from February 2020 to February 2021 in the "Chemical mfg" category, which has been applied to MURS rates for FY 2021-2022.

The maximum amount of yearly disbursements from the Barnwell Decommissioning Trust Fund and/or Barnwell Extended Care Maintenance Fund shall be **increased from \$2,506,039 to \$2,561,172** based on the February 2021 PPI **increase of 2.2 percent** for "Other selected services less trade, transportation, and warehousing industries". The Bureau of Labor and Statistics has updated the name of this category from "Other Selected Traditional Service Industries," which has previously been used for PPI updates.

Sincerely,

Nanette Edwards
Executive Director
South Carolina Office of Regulatory Staff



Pursuant to 48-46-40(A)(2), S.C.C.

Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste

EFFECTIVE JULY 1, 2021

The Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste is a permanent ceiling on disposal rates applicable to Atlantic Compact waste that is adjusted each year in accordance with the Producer Price Index. South Carolina may charge Atlantic Compact generators less than the Uniform Maximum schedule but cannot charge regional generators more than this rate.

THE MINIMUM CHARGE PER SHIPMENT, EXCLUDING SURCHARGES AND SPECIFIC OTHER CHARGES, IS \$1,000.00

1. WEIGHT CHARGES (not including surcharges)

A. Base weight charge

Density Range	Weight Rate
i.) Equal to or greater than 120 lbs./ft ³	\$ 8.605 per pound
ii.) Equal to or greater than 75 lbs./ft ³ and less than 120 lbs./ft ³	\$ 9.466 per pound
iii.) Equal to or greater than 60 lbs./ft ³ and less than 75 lbs./ft ³	\$ 11.616 per pound
iv.) Equal to or greater than 45 lbs./ft ³ and less than 60 lbs./ft ³	\$ 15.060 per pound
v.) Less than 45 lbs./ft ³	\$ 15.060 per pound multiplied by: (45 ÷ pounds per cubic foot of the package)

B. Dose multiplier on base weight charge

Container Dose Level			Multiplier on Weight Rate, above
0 mR/hr	-	200 mR/hr	1.00
>200 mR/hr	-	1 R/hr	1.08
>1R/hr	-	2R/hr	1.12
>2R/hr	-	3R/hr	1.17
>3R/hr	-	4R/hr	1.22
>4R/hr	-	5R/hr	1.27
>5R/hr	-	10R/hr	1.32
>10R/hr	-	25R/hr	1.37
>25R/hr	-	50R/hr	1.42
>50R/hr			1.48



Pursuant to 48-46-40(A)(2), S.C.C.

C. Biological Waste: Add \$1.803 per pound to rate calculated above

2. SURCHARGES

A. Millicurie surcharge \$0.644 per millicurie*

*In lieu of above, generator may opt for an alternative millicurie charge of \$1.288 per millicurie applicable only to millicuries with greater than 5-year half-life. Such election must be provided in writing to the disposal site operator prior to July 1, 2021.

MAXIMUM MILLICURIE CHARGE IS \$257,600, PER SHIPMENT (400,000 MCI).

B. Irradiated Hardware Charges (See Note B under Miscellaneous) \$97,799 per shipment

C. Special Nuclear Material Surcharge \$19.555 per gram

D. Atlantic Compact Commission administrative surcharge \$6.00 per cubic foot
(Subject to change during year)

NOTES

A. Surcharges for the Barnwell Extended Care Fund and the Decommissioning Trust Fund are included in the rates.

B. Irradiated hardware: As a general rule, billing as irradiated hardware pertains to shipments of exceptionally high activity that require clearing of the site and special off-loading into a slit trench. These generally include TN-RAM and other horizontally offloaded cask shipments. In addition to items of irradiated hardware, shipments considered irradiated hardware, for purposes of disposal, have included certain sealed sources and materials with exceptionally high levels of radioactivity.

C. Large components (e.g., steam generators, reactor pressure vessels, coolant pumps)

Disposal fees for large components (e.g., steam generators, reactor pressure vessels, reactor coolant pumps, or items that will not fit into standard sized disposal vaults) are based on the generally applicable rates, in their entirety, except that the weight and volume used to determine density and weight related charges is calculated as follows:

1. For packages where the large component shell qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on all sub-components and material contained within the inside surface of the large component shell, including all internals and any stabilization media injected by the shipper, but excluding the shell itself and all incidental external attachments required for shipping and handling; and

2. For packages with a separate shipping container that qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on the large component, all sub-components and material contained within the inside surface of the shipping container, including any stabilization media injected by the shipper (including that between the large component and the shipping



Pursuant to 48-46-40(A)(2), S.C.C.

container), but excluding the shipping container itself and all incidental external attachments required for shipping and handling.

- D. Co-mingled shipments from brokers and processors: For containers that include waste from different generators (DHEC permittees), the weight and density of the waste from each generator will be assessed separately for purposes of the weight charge in I.A. The dose of the container as a whole will be used to assess the dose multiplier in I.B. The millicurie charge 2.A. above, applies individually to each portion of waste in the shipment from each generator. The disposal site operator will provide guidelines for application of this method.
- E. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- F. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- G. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:
 - i. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.
 - ii. Company purchase orders or a written letter of authorization and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
 - iii. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.



Atlantic Compact Regional Waste Alternative Rate Schedule Effective July 1, 2021

Option A Pricing (applicable to Generators who do not elect Option B Access Fee Pricing)

Use Maximum Uniform Rate Schedule

Option B Access Fee (at Generator's election)

An individual nuclear power reactor, or any non-reactor waste generator with a South Carolina permit to ship waste to the Barnwell site is eligible to be an Option B Participant.

Option B Participants may elect Option B Access Fee pricing by committing to an annual access fee to be paid in quarterly installments. The first quarter's access fee will be assessed on July 15, 2021. All Option B participants will provide the disposal site operator a volume projection and shipping schedule for Fiscal Year ("FY") 2022 and update the projection and shipping schedule throughout the year, as necessary.

QUARTERLY ACCESS FEE

Option B Participants shall pay a quarterly access fee and an annual true-up payment, if required, in lieu of disposal charges for individual shipments.

The access fee for all four quarters must be paid, even if the Option B Participant does not plan to ship waste during any specific quarter. Quarterly access fee payments are due not later than:

- July 15, 2021
- October 1, 2021
- January 1, 2022
- April 1, 2022

An interim revenue requirement shall be used as the basis for determining an annual access fee for each Option B Participant. The annual access fee may be determined by dividing the interim revenue requirement for operating costs (less the amount of payments projected to be received from Option A disposal rate customers), evenly among all Option B Participants or an additional allocation method agreed upon between Energy Solutions/Chem-Nuclear and each Option B Participant.

The annual access fees for each Option B Participant shall be split into quarterly payments. In recognition of the request by Option B Participants for billing to reflect a calendar year budgeting cycle, the quarterly access fee payments shall be calculated using the interim revenue requirement for both the current fiscal year and the prior fiscal year as follows:

The interim revenue requirement for the current fiscal year, FY 2022, is \$6,000,000.
The interim revenue requirement for the prior fiscal year, FY 2021, was \$6,500,000.¹

¹ In general these numbers may vary. In years where the interim revenue requirement for the current fiscal year differs from the interim revenue requirement for the prior fiscal year, a final annual true-up payment may be billed as modified by any amounts payable to the Option B Participants as outlined in the Rate Reconciliation section.

The quarterly access fee for payments due July 15, 2021 and October 1, 2021 shall be calculated based on the interim revenue requirement for the current fiscal year, FY 2022. The interim revenue requirement for FY 2022 (less the amount of payments projected to be received from Option A disposal rate customers), shall be divided in half, and that amount shall be divided into two quarterly payments and shall be divided evenly among all Option B Participants.

The quarterly access fee for payments due January 1, 2022 and April 1, 2022 shall be based on the interim revenue requirement for the current fiscal year, FY 2022. The interim revenue requirement for FY 2022 (less the amount of payments projected to be received from Option A disposal rate customers) shall be divided in half, and that amount shall be divided into two quarterly payments and shall be divided evenly among all Option B Participants.

Chem-Nuclear shall monitor costs and cash receipts from July 2021 through February 2022 and, if a significant over collection is anticipated, may reduce a future access fee payment to reduce the anticipated over collection.

VOLUME ALLOCATIONS

Volume Allocations. Each Option B Participant shall be allocated an equal share of up to 7,000 cubic feet of disposal capacity (volume allocation), which may be disposed at no further charge. Volume allocations for Option B Participants may be pooled within a company upon written notification to Chem-Nuclear from the applicable Participants prior to August 1, 2021. An Option B Participant may transfer unused allocation to another Option B Participant by providing Chem-Nuclear a signed statement executing the transfer.

VARIABLE COST SURCHARGE

For each cubic foot of waste received that is in excess of an Option B Participant's volume allocation (or pooled allocation), the Participant shall be assessed an additional \$110 per cubic foot to cover variable costs and margin related to acceptance of the waste. (The variable cost surcharge does not apply to any waste volume resulting from the transfer of excess volume allocation from one Option B Participant to another.)

RATE RECONCILIATION

Final approval by the PSC of allowable operating costs for FY 2021 is expected no later than June 30, 2022. In the event that the total of operating costs approved by the PSC, plus margin, for FY 2021 is less than the amounts paid through Option B fees and variable cost surcharges, plus payments received for Any Option A disposal charges, Irradiated Hardware, Steam Generators or other Large Components, each Option B Participant will be due an equal share of the over-payment. The over-payment will be processed by the method agreed upon by the Option B Participants. If an Option B Participant from FY 20/21 is no longer a participant, that participant's over-payment will be refunded no later than June 30, 2022.

If the total of operating costs approved by the PSC, plus margin, for FY 2021 exceeds the amounts paid through Option B fees and variable cost surcharges, plus payments received for any Option A disposal charges, Irradiated Hardware, Steam Generators, or other Large Components, each Option B Participant will be invoiced no later than June 30, 2022 on a proportionate per reactor basis share of the difference, unless EnergySolutions/Chem-Nuclear voluntarily waives its rights under South Carolina law to seek or accept such revenues.

VOLUME PROJECTIONS

Each Option B Participant shall provide the disposal site operator a projection of its expected waste volumes for the fiscal year not later than July 1, 2021, and will update the projection on a quarterly basis, or as conditions warrant. Option B Participants recognize that shipment of waste to the disposal site at a relatively even pace throughout the fiscal year helps minimize operating costs.

IRRADIATED HARDWARE (See Note D)

Irradiated Hardware is not included in Volume Allocations and is not considered as waste in excess of volume allocations. Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator to dispose of the waste.

STEAM GENERATORS AND OTHER LARGE COMPONENTS (See Note E)

Large Components are not included in Volume Allocations and are not considered as waste in excess of volume allocations. Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator to dispose of the waste.

NOTES:

- A. Due to staffing limitations, Chem-Nuclear is authorized to limit total waste volumes received during the fiscal year to 12,433 cubic feet (excluding large components and irradiated hardware).
- B. Surcharges for the extended care fund and decommissioning trust fund are included in the disposal rates.
- C. Sealed sources: Requests for disposal are reviewed by South Carolina Department of Health and Environmental Control to ensure that the waste was generated within the Atlantic Compact region.
- D. Irradiated hardware and high dose shipments: As a general rule, case-by-case billing as irradiated hardware pertains to shipments of exceptionally high activity that require clearing of the site and special off-loading into a slit trench. These generally include TN-RAM and other horizontally offloaded cask shipments. In addition to items of irradiated hardware, if a shipment requires substantial special handling, due to exceptionally high package surface doses, additional surcharges may be authorized by Board staff in an amount that will reimburse the site operator for costs that have not been budgeted.
- E. Large components: Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator, and associated margin, as a result of the request for disposal and disposal of the waste. Large components include steam generators, reactor pressure vessels, reactor coolant pumps, or items that require construction of special-sized disposal vaults. Large components also include items that may fit into the standard sized vault but fit so inefficiently due to their shape and geometry that it is less costly to build a specially sized vault.
- F. Because the disposal of large components is rare and is not considered as a factor in planning and budgeting for site operations, a supplemental service fee sufficient to cover all additional costs and margin may be authorized by Board staff to cover the disposal site operator's costs for planning, consultation, feasibility studies, cost estimating, regulatory consultation, and other necessary costs that have not been budgeted and accounted for as operating costs for the fiscal year. This supplemental service fee is applicable whether or not the generator ultimately commits to disposal of the large component(s), and whether or not the waste is eventually disposed at the Barnwell site.
- G. Because the operating costs for disposal of large components may be significantly affected by the number of such components and the schedule for delivery, generators are strongly encouraged to coordinate their plans for shipment of large components to Barnwell in order to reduce unit costs through better economies of scale. Early in project planning, shippers are encouraged to consult with the disposal site operator on designs and configurations that may reduce handling and offloading costs at the disposal site.
- H. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- I. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- J. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:
 - i. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.

- ii. Company purchase orders or a written letter of authorization and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
- iii. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.

Table 10. Producer price indexes for the net output of selected industries and industry groups, not seasonally adjusted — Continued

Industry ¹	Industry code	Index base	Index			Percent change to Feb. 2021 from:	
			Oct. 2020 ²	Jan. 2021 ²	Feb. 2021 ²	Feb. 2020	Jan. 2021
Internet publishing and web search portals.....	519130	12/09	82.7	83.7	84.3	7.3	0.7
Selected health care industries.....		12/06	131.0	132.7	133.1	3.8	0.3
Offices of physicians.....	6211	12/96	137.7	141.3	140.8	2.8	-0.4
Offices of dentists.....	6212	06/10	121.4	121.8	122.4	4.2	0.5
Medical and diagnostic laboratories.....	6215	12/03	103.9	103.9	104.0	0.7	0.1
Home health care services.....	6216	12/96	149.1	149.6	149.9	2.3	0.2
Blood and organ banks.....	621991	06/06	120.4	120.3	120.6	1.6	0.2
Hospitals.....	622	12/92	213.0	215.7	216.8	4.6	0.5
Nursing care facilities.....	6231	12/03	161.7	162.0	162.1	3.1	0.1
Residential developmental disability homes.....	62321	12/03	190.1	190.2	191.3	4.5	0.6
Other selected services less trade, transportation, and warehousing industries.....		12/06	127.4	130.3	130.7	2.2	0.3
Depository credit intermediation.....	5221	12/03	95.5	99.1	99.5	-4.1	0.4
Security, commodity contracts and like activity.....	523	12/03	203.4	216.3	219.7	9.8	1.6
Insurance carriers and related activities.....	524	12/03	143.2	142.9	142.9	-0.1	0.0
Lessors of nonres bldg (exc miniwarehouse).....	53112	12/03	132.3	131.8	129.7	1.5	-1.6
Lessors of miniwarehouse and self storage units.....	53113	12/03	147.0	149.8	150.2	1.6	0.3
Offices of real estate agents and brokers.....	5312	12/03	153.3	158.1	158.4	7.1	0.2
Real estate property managers.....	53131	12/03	119.1	118.7	118.1	-1.3	-0.5
Offices of real estate appraisers.....	531320	12/03	102.7	102.8	103.4	-0.7	0.6
Automotive equipment rental and leasing.....	5321	06/01	127.1	121.3	126.4	-1.2	4.2
Other heavy machinery rental and leasing.....	532412	12/03	117.1	117.0	119.2	-1.2	1.9
Legal services.....	5411	12/96	234.9	237.6	239.9	3.3	1.0
Offices of certified public accountants.....	541211	12/03	124.6	129.6	128.5	2.3	-0.8
Other accounting services.....	541219	12/03	134.9	135.3	139.0	-0.9	2.7
Architectural, engineering and related services.....	5413	12/96	170.2	172.8	173.8	1.3	0.6
Management and technical consulting services.....	5416	06/06	107.2	127.7	127.8	18.4	0.1
Advertising agencies.....	54181	12/03	113.9	114.5	114.3	-0.5	-0.2
Employment services.....	5613	12/96	146.3	147.3	148.7	4.2	1.0
Travel agencies.....	56151	12/03	97.1	97.8	98.4	-0.7	0.6
Security guards and patrol services.....	561612	12/04	132.6	134.1	134.2	4.2	0.1
Janitorial services.....	56172	12/03	123.3	123.2	123.5	0.2	0.2
Waste collection.....	5621	12/03	151.4	151.9	-	-	-
Amusement and theme parks.....	71311	06/06	187.1	181.8	183.6	-3.4	1.0
Golf courses and country clubs.....	71391	12/05	131.6	137.4	137.4	3.9	0.0
Fitness and recreational sports centers.....	71394	12/04	106.1	106.3	106.2	0.7	-0.1
Accommodation.....	721	12/96	152.1	157.4	154.0	-6.3	-2.2
Commercial machinery repair and maintenance.....	8113	06/06	142.3	143.0	144.0	3.0	0.7

¹ Indexes in this table are derived from the net-output-weighted industry price indexes. Because of differences in coverage and aggregation methodology, they will generally not match the movements of similarly titled indexes which are derived from traditional commodity groupings.

² The indexes for October 2020 have been recalculated to incorporate late reports and corrections by respondents. All indexes are subject to revision 4 months after original publication.

³ Formerly titled "Total traditional service industries."

"-" Data not available.

NOTE: NAICS replaced the SIC system beginning with the release of PPI data for January 2004. See <https://www.bls.gov/ppi/ppinaics.htm> for details.

Table 11. Producer price indexes for the net output of selected industries and their products, not seasonally adjusted — Continued

Industry and product ¹	Industry code	Product code	Index base	Index			Percent change to Feb. 2021 from:	
				Oct. 2020 ²	Jan. 2021 ²	Feb. 2021 ²	Feb. 2020	Jan. 2021
Asphalt paving mixture & block manufacturing - Continued								
Other liquid asphalt and tar paving materials, including cut-backs.....		324121-0121	12/04	256.1	255.3	257.6	-0.3	0.9
Asphalt and tar paving mixt. (excl liquid), incl bitum. or asph. concrete, asph. paving cement.....		324121-0131	12/04	207.9	239.7	240.8	0.6	0.5
Other asphaltic paving mixtures, excluding brick, concrete, granite, or stone. . . .		324121-0141	12/09	120.2	120.2	—	—	—
Secondary products and miscellaneous receipts.....		324121-SM						
Miscellaneous receipts.....		324121-M	12/04	165.7	166.6	166.0	4.1	-0.4
Asphalt shingle and coating materials manufacturing.....	324122		06/84	253.6	261.0	260.9	3.1	0.0
Primary products.....		324122-P	06/84	255.2	263.0	262.6	3.1	-0.2
Roofing asphalts and pitches, coatings, and cements.....		324122-1	06/84	253.0	252.7	253.0	-0.1	0.1
Prepared asphalt and tar roofing and siding products, incl. saturated felts for nonbuilding use.....		324122-2	06/84	251.7	260.7	260.2	3.7	-0.2
Asphalt smooth-surfaced roll roofing and cap sheets, organic and fiberglass base.....		324122-21	12/12	103.0	98.5	98.5	-1.8	0.0
Asphalt mineral-surfaced roll roofing and cap sheets, organic and fiberglass base.....		324122-22	06/06	205.3	204.5	204.5	3.4	0.0
Other prepared asphalt and tar products for roofing and siding.....		324122-27	06/06	135.0	134.0	135.2	-3.2	0.9
Secondary products and miscellaneous receipts.....		324122-SM						
Other petroleum and coal products mfg.....	32419		12/84	410.1	414.9	410.8	-2.1	-1.0
Petroleum lubricating oil and grease mfg.....	324191		12/80	462.8	467.4	468.9	0.0	0.3
Primary products.....		324191-P	12/80	484.5	489.8	491.2	0.1	0.3
Petroleum lubricating oils and greases, refined petroleum.....		324191-0	12/80	484.5	489.8	491.2	0.1	0.3
Lubricating oils (incl. hydraulic fluids, etc.), refined petroleum.....		324191-011	12/80	496.6	502.1	503.8	0.0	0.3
Lubricating greases, made from refined petroleum.....		324191-012	12/80	399.1	402.6	402.6	0.8	0.0
Secondary products and miscellaneous receipts.....		324191-SM						
Secondary products.....		324191-S	12/80	305.5	305.5	307.5	0.5	0.7
All other petroleum and coal products mfg.....	324199		12/03	267.4	272.3	255.6	-10.2	-6.1
Primary products.....		324199-P	12/03	278.6	282.8	264.6	-10.2	-6.4
Coke oven and blast furnace products, made in coke oven establishments.....		324199-3	12/09	153.9	161.7	138.4	-12.1	-14.4
All other petroleum and coal products (excl. coke oven products), made in coke oven estab.....		324199-9	12/02	275.7	268.6	277.8	-8.2	3.4
Secondary products and miscellaneous receipts.....		324199-SM						
Chemical mfg.....	325		12/84	290.7	298.2	302.2	3.7	1.3
Basic chemical mfg.....	3251		12/84	311.8	329.0	338.2	6.3	2.8
Petrochemical mfg.....	32511		12/03	106.6	128.4	138.7	16.2	8.0
Petrochemical manufacturing.....	325110		12/03	107.9	130.4	140.3	17.2	7.6
Primary products.....		325110-P	12/03	121.9	151.4	158.3	3.6	4.6
Secondary products and miscellaneous receipts.....		325110-SM						
Industrial gas mfg.....	32512		12/03	179.6	187.1	187.2	-2.1	0.1
Industrial gas manufacturing.....	325120		12/03	180.1	187.6	187.8	-1.8	0.1
Primary products.....		325120-P	06/81	297.9	310.7	310.9	1.7	0.1
Oxygen.....		325120-A	06/81	307.1	381.3	378.5	22.7	-0.7
Argon and hydrogen.....		325120-C	06/09	91.3	89.4	89.0	1.5	-0.4
Other industrial gases (including fluorocarbon and acetylene).....		325120-T	06/09	206.5	207.7	208.3	-4.2	0.3
Carbon dioxide.....		325120-4	06/81	481.6	508.3	508.0	12.5	-0.1
Nitrogen.....		325120-7	06/81	202.6	248.5	248.6	23.5	0.0
Secondary products and miscellaneous receipts.....		325120-SM						
Synthetic dye and pigment mfg.....	32513		12/03	145.6	140.5	140.7	-1.5	0.1
Synthetic dye and pigment manufacturing.....	325130		12/11	96.2	92.8	93.0	-1.5	0.2
Primary products.....		325130-P	12/11	94.9	91.2	91.2	-1.9	0.0
Chrome colors and other inorganic pigments.....		325130-7	06/83	278.0	278.0	277.6	-0.2	-0.1
Chrome colors.....		325130-71	12/01	177.2	—	—	—	—
Iron oxide pigments.....		325130-72	06/83	281.5	281.5	277.8	-0.9	-1.3
All other inorganic pigments, including white extender pigments and ceramic color pigments.....		325130-73	12/97	196.1	196.1	196.1	-0.2	0.0
Synthetic organic dyes.....		325130-8	12/82	100.0	95.8	95.8	-27.7	0.0
Synthetic organic pigments, lakes, and toners.....		325130-9	12/82	164.6	162.6	162.6	-1.5	0.0
Secondary products and miscellaneous receipts.....		325130-SM						
Other basic inorganic chemical manufacturing.....	32518		12/03	268.4	272.1	273.0	4.5	0.3
Other basic inorganic chemical manufacturing.....	325180		12/10	117.0	118.6	119.0	4.4	0.3
Primary products.....		325180-P	12/10	100.6	101.7	102.2	2.4	0.5
Potassium and sodium compounds, excluding bleaches, alkalies, and alum.....		325180-A	12/82	418.0	414.3	417.8	-0.2	0.8
All other inorganic chemicals.....		325180-H	12/03	306.6	313.3	314.7	7.3	0.4
Inorganic acids, excluding nitric, sulfuric and phosphoric.....		325180-3	12/82	109.6	108.9	109.9	-20.2	0.9
Sodium hydroxide (caustic soda).....		325180-4	12/80	386.9	375.9	376.7	0.3	0.2

See footnotes at end of table.



**Atlantic Compact Regional Waste
Alternative Rate Schedule**
Effective July 1, 2021

Option A Pricing (applicable to Generators who do not elect Option B Access Fee Pricing)

Use Maximum Uniform Rate Schedule

Option B Access Fee (at Generator's election)

An individual nuclear power reactor, or any non-reactor waste generator with a South Carolina permit to ship waste to the Barnwell site is eligible to be an Option B Participant.

Option B Participants may elect Option B Access Fee pricing by committing to an annual access fee to be paid in quarterly installments. The first quarter's access fee will be assessed on July 15, 2021. All Option B participants will provide the disposal site operator a volume projection and shipping schedule for Fiscal Year ("FY") 2022 and update the projection and shipping schedule throughout the year, as necessary.

QUARTERLY ACCESS FEE

Option B Participants shall pay a quarterly access fee and an annual true-up payment, if required, in lieu of disposal charges for individual shipments.

The access fee for all four quarters must be paid, even if the Option B Participant does not plan to ship waste during any specific quarter. Quarterly access fee payments are due not later than:

- July 15, 2021
- October 1, 2021
- January 1, 2022
- April 1, 2022

An interim revenue requirement shall be used as the basis for determining an annual access fee for each Option B Participant. The annual access fee may be determined by dividing the interim revenue requirement for operating costs (less the amount of payments projected to be received from Option A disposal rate customers), evenly among all Option B Participants or an additional allocation method agreed upon between Energy Solutions/Chem-Nuclear and each Option B Participant.

The annual access fees for each Option B Participant shall be split into quarterly payments. In recognition of the request by Option B Participants for billing to reflect a calendar year budgeting cycle, the quarterly access fee payments shall be calculated using the interim revenue requirement for both the current fiscal year and the prior fiscal year as follows:

The interim revenue requirement for the current fiscal year, FY 2022, is \$6,000,000.
The interim revenue requirement for the prior fiscal year, FY 2021, was \$6,500,000.¹

¹ In general these numbers may vary. In years where the interim revenue requirement for the current fiscal year differs from the interim revenue requirement for the prior fiscal year, a final annual true-up payment may be billed as modified by any amounts payable to the Option B Participants as outlined in the Rate Reconciliation section.

The quarterly access fee for payments due July 15, 2021 and October 1, 2021 shall be calculated based on the interim revenue requirement for the current fiscal year, FY 2022. The interim revenue requirement for FY 2022 (less the amount of payments projected to be received from Option A disposal rate customers), shall be divided in half, and that amount shall be divided into two quarterly payments and shall be divided evenly among all Option B Participants.

The quarterly access fee for payments due January 1, 2022 and April 1, 2022 shall be based on the interim revenue requirement for the current fiscal year, FY 2022. The interim revenue requirement for FY 2022 (less the amount of payments projected to be received from Option A disposal rate customers) shall be divided in half, and that amount shall be divided into two quarterly payments and shall be divided evenly among all Option B Participants.

Chem-Nuclear shall monitor costs and cash receipts from July 2021 through February 2022 and, if a significant over collection is anticipated, may reduce a future access fee payment to reduce the anticipated over collection.

VOLUME ALLOCATIONS

Volume Allocations. Each Option B Participant shall be allocated an equal share of up to 7,000 cubic feet of disposal capacity (volume allocation), which may be disposed at no further charge. Volume allocations for Option B Participants may be pooled within a company upon written notification to Chem-Nuclear from the applicable Participants prior to August 1, 2021. An Option B Participant may transfer unused allocation to another Option B Participant by providing Chem-Nuclear a signed statement executing the transfer.

VARIABLE COST SURCHARGE

For each cubic foot of waste received that is in excess of an Option B Participant's volume allocation (or pooled allocation), the Participant shall be assessed an additional \$110 per cubic foot to cover variable costs and margin related to acceptance of the waste. (The variable cost surcharge does not apply to any waste volume resulting from the transfer of excess volume allocation from one Option B Participant to another.)

RATE RECONCILIATION

Final approval by the PSC of allowable operating costs for FY 2021 is expected no later than June 30, 2022. In the event that the total of operating costs approved by the PSC, plus margin, for FY 2021 is less than the amounts paid through Option B fees and variable cost surcharges, plus payments received for Any Option A disposal charges, Irradiated Hardware, Steam Generators or other Large Components, each Option B Participant will be due an equal share of the over-payment. The over-payment will be processed by the method agreed upon by the Option B Participants. If an Option B Participant from FY 20/21 is no longer a participant, that participant's over-payment will be refunded no later than June 30, 2022.

If the total of operating costs approved by the PSC, plus margin, for FY 2021 exceeds the amounts paid through Option B fees and variable cost surcharges, plus payments received for any Option A disposal charges, Irradiated Hardware, Steam Generators, or other Large Components, each Option B Participant will be invoiced no later than June 30, 2022 on a proportionate per reactor basis share of the difference, unless EnergySolutions/Chem-Nuclear voluntarily waives its rights under South Carolina law to seek or accept such revenues.

VOLUME PROJECTIONS

Each Option B Participant shall provide the disposal site operator a projection of its expected waste volumes for the fiscal year not later than July 1, 2021, and will update the projection on a quarterly basis, or as conditions warrant. Option B Participants recognize that shipment of waste to the disposal site at a relatively even pace throughout the fiscal year helps minimize operating costs.

IRRADIATED HARDWARE (See Note D)

Irradiated Hardware is not included in Volume Allocations and is not considered as waste in excess of volume allocations. Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator to dispose of the waste.

STEAM GENERATORS AND OTHER LARGE COMPONENTS (See Note E)

Large Components are not included in Volume Allocations and are not considered as waste in excess of volume allocations. Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator to dispose of the waste.

NOTES:

- A. Due to staffing limitations, Chem-Nuclear is authorized to limit total waste volumes received during the fiscal year to 12,433 cubic feet (excluding large components and irradiated hardware).
- B. Surcharges for the extended care fund and decommissioning trust fund are included in the disposal rates.
- C. Sealed sources: Requests for disposal are reviewed by South Carolina Department of Health and Environmental Control to ensure that the waste was generated within the Atlantic Compact region.
- D. Irradiated hardware and high dose shipments: As a general rule, case-by-case billing as irradiated hardware pertains to shipments of exceptionally high activity that require clearing of the site and special off-loading into a slit trench. These generally include TN-RAM and other horizontally offloaded cask shipments. In addition to items of irradiated hardware, if a shipment requires substantial special handling, due to exceptionally high package surface doses, additional surcharges may be authorized by Board staff in an amount that will reimburse the site operator for costs that have not been budgeted.
- E. Large components: Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator, and associated margin, as a result of the request for disposal and disposal of the waste. Large components include steam generators, reactor pressure vessels, reactor coolant pumps, or items that require construction of special-sized disposal vaults. Large components also include items that may fit into the standard sized vault but fit so inefficiently due to their shape and geometry that it is less costly to build a specially sized vault.
- F. Because the disposal of large components is rare and is not considered as a factor in planning and budgeting for site operations, a supplemental service fee sufficient to cover all additional costs and margin may be authorized by Board staff to cover the disposal site operator's costs for planning, consultation, feasibility studies, cost estimating, regulatory consultation, and other necessary costs that have not been budgeted and accounted for as operating costs for the fiscal year. This supplemental service fee is applicable whether or not the generator ultimately commits to disposal of the large component(s), and whether or not the waste is eventually disposed at the Barnwell site.
- G. Because the operating costs for disposal of large components may be significantly affected by the number of such components and the schedule for delivery, generators are strongly encouraged to coordinate their plans for shipment of large components to Barnwell in order to reduce unit costs through better economies of scale. Early in project planning, shippers are encouraged to consult with the disposal site operator on designs and configurations that may reduce handling and offloading costs at the disposal site.
- H. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- I. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- J. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:
 - i. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.

- ii. Company purchase orders or a written letter of authorization and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
- iii. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.



Pursuant to 48-46-40(A)(2), S.C.C.

Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste

EFFECTIVE JULY 1, 2021

The Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste is a permanent ceiling on disposal rates applicable to Atlantic Compact waste that is adjusted each year in accordance with the Producer Price Index. South Carolina may charge Atlantic Compact generators less than the Uniform Maximum schedule but cannot charge regional generators more than this rate.

THE MINIMUM CHARGE PER SHIPMENT, EXCLUDING SURCHARGES AND SPECIFIC OTHER CHARGES, IS \$1,000.00

1. WEIGHT CHARGES (not including surcharges)

A. Base weight charge

Density Range	Weight Rate
i.) Equal to or greater than 120 lbs./ft ³	\$ 8.605 per pound
ii.) Equal to or greater than 75 lbs./ft ³ and less than 120 lbs./ft ³	\$ 9.466 per pound
iii.) Equal to or greater than 60 lbs./ft ³ and less than 75 lbs./ft ³	\$ 11.616 per pound
iv.) Equal to or greater than 45 lbs./ft ³ and less than 60 lbs./ft ³	\$ 15.060 per pound
v.) Less than 45 lbs./ft ³	\$ 15.060 per pound multiplied by: (45 ÷ pounds per cubic foot of the package)

B. Dose multiplier on base weight charge

Container Dose Level			Multiplier on Weight Rate, above
0 mR/hr	-	200 mR/hr	1.00
>200 mR/hr	-	1 R/hr	1.08
>1R/hr	-	2R/hr	1.12
>2R/hr	-	3R/hr	1.17
>3R/hr	-	4R/hr	1.22
>4R/hr	-	5R/hr	1.27
>5R/hr	-	10R/hr	1.32
>10R/hr	-	25R/hr	1.37
>25R/hr	-	50R/hr	1.42
>50R/hr			1.48



Pursuant to 48-46-40(A)(2), S.C.C.

C. Biological Waste: Add \$1.803 per pound to rate calculated above

2. SURCHARGES

A. Millicurie surcharge \$0.644 per millicurie*

*In lieu of above, generator may opt for an alternative millicurie charge of \$1.288 per millicurie applicable only to millicuries with greater than 5-year half-life. Such election must be provided in writing to the disposal site operator prior to July 1, 2021.

MAXIMUM MILLICURIE CHARGE IS \$257,600, PER SHIPMENT (400,000 MCI).

B. Irradiated Hardware Charges (See Note B under Miscellaneous) \$97,799 per shipment

C. Special Nuclear Material Surcharge \$19.555 per gram

D. Atlantic Compact Commission administrative surcharge \$6.00 per cubic foot
(Subject to change during year)

NOTES

A. Surcharges for the Barnwell Extended Care Fund and the Decommissioning Trust Fund are included in the rates.

B. Irradiated hardware: As a general rule, billing as irradiated hardware pertains to shipments of exceptionally high activity that require clearing of the site and special off-loading into a slit trench. These generally include TN-RAM and other horizontally offloaded cask shipments. In addition to items of irradiated hardware, shipments considered irradiated hardware, for purposes of disposal, have included certain sealed sources and materials with exceptionally high levels of radioactivity.

C. Large components (e.g., steam generators, reactor pressure vessels, coolant pumps)

Disposal fees for large components (e.g., steam generators, reactor pressure vessels, reactor coolant pumps, or items that will not fit into standard sized disposal vaults) are based on the generally applicable rates, in their entirety, except that the weight and volume used to determine density and weight related charges is calculated as follows:

1. For packages where the large component shell qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on all sub-components and material contained within the inside surface of the large component shell, including all internals and any stabilization media injected by the shipper, but excluding the shell itself and all incidental external attachments required for shipping and handling; and

2. For packages with a separate shipping container that qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on the large component, all sub-components and material contained within the inside surface of the shipping container, including any stabilization media injected by the shipper (including that between the large component and the shipping



Pursuant to 48-46-40(A)(2), S.C.C.

container), but excluding the shipping container itself and all incidental external attachments required for shipping and handling.

- D. Co-mingled shipments from brokers and processors: For containers that include waste from different generators (DHEC permittees), the weight and density of the waste from each generator will be assessed separately for purposes of the weight charge in I.A. The dose of the container as a whole will be used to assess the dose multiplier in I.B. The millicurie charge 2.A. above, applies individually to each portion of waste in the shipment from each generator. The disposal site operator will provide guidelines for application of this method.
- E. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- F. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- G. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:
 - i. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.
 - ii. Company purchase orders or a written letter of authorization and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
 - iii. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.