



**Atlantic Compact Regional Waste
Alternative Rate Schedule**
Effective July 1, 2019

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, 2019. All Option B participants will provide the disposal site operator a volume projection and shipping schedule for Fiscal Year ("FY") 2020, 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, 2019
- October 1, 2019
- January 1, 2020
- April 1, 2020

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 2020, is \$6,850,976.
The interim revenue requirement for the prior fiscal year, FY 2019, was \$6,850,976.¹

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. However, for FY 2019 and FY 2020 the Interim Revenue Requirements are the same.

The quarterly access fee for payments due July 15, 2019 and October 1, 2019 shall be calculated based on the interim revenue requirement for the prior fiscal year, FY 2019. The interim revenue requirement for FY 2019 (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, 2020 and April 1, 2020 shall be based on the interim revenue requirement for the current fiscal year, FY 2020. The interim revenue requirement for FY 2020 (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 2019 through February 2020 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, 2019. 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 \$133 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 2019 is expected no later than June 30, 2019. In the event that the total of operating costs approved by the PSC, plus margin, for FY 2019 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 18/19 is no longer a participant, that participant's over-payment will be refunded no later than June 30, 2020.

If the total of operating costs approved by the PSC, plus margin, for FY 2019 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, 2020 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, 2019, 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, 2019

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	\$ 8.373 per pound
ii.) Equal to or greater than 75 lbs./ft ³ and less than 120 lbs./ft ³	\$ 9.211 per pound
iii.) Equal to or greater than 60 lbs./ft ³ and less than 75 lbs./ft ³	\$ 11.304 per pound
iv.) Equal to or greater than 45 lbs./ft ³ and less than 60 lbs./ft ³	\$ 14.655 per pound
v.) Less than 45 lbs./ft ³	\$ 14.655 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 \$1.819 per pound to rate calculated above

2. SURCHARGES

A. Millicurie surcharge \$0.627 per millicurie*

*In lieu of above, generator may opt for an alternative millicurie charge of \$1.253 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, 2019.

MAXIMUM MILLICURIE CHARGE IS \$250,800 PER SHIPMENT (400,000 MCI).

B. Irradiated Hardware Charges (See Note B under Miscellaneous) \$95,166 per shipment

C. Special Nuclear Material Surcharge \$19.028 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.