

Exhibit D

Statement of Costs and Financing

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D.1 Original Cost of the Project

The Yadkin Project (Project) was originally licensed with an effective date of May 1, 1958. Because this is not an initial license, a tabulated statement of original cost of Project land or water rights, structures, or facilities is not necessary.

D.2 Estimated Takeover Costs as per Section 14 of the Federal Power Act

Section 14 of the Federal Power Act (FPA) reserves to the United States the right to take over a non-publicly owned project upon expiration of its license. In the event that such take over is ordered by the Federal Energy Regulatory Commission (FERC), Alcoa Power Generating Inc. (APGI) would, pursuant to Section 14, be entitled to be reimbursed for its “net investment”, not to exceed “fair value,” plus any “severance damages” suffered (see 16 U.S.C. § 807). At the time of the filing of this License Application, there was no indication that any federal department or agency, state or municipality has or will recommend takeover or redevelopment of the Project. Nonetheless, APGI hereby submits the basic information required by FERC’s regulations that would be needed to quantify the compensation to be paid to APGI pursuant to Section 14.

D.2.1 Fair Value

“Fair value” as that term is used in the FPA and for the purpose of this License Application, is calculated as the present cost of project reproduction less estimated depreciation. “Fair value” does not mean “fair market value” but rather is a specialized calculation of a company’s unrecovered capital investment in today’s dollars. The Handy-Whitman Cost Index (Index), a standard tool used in the utility industry to estimate the reproduction costs of utility assets, such as the project works, has been used to estimate the Project reproduction costs in 2005 dollars. For the purposes of this License Application, plant depreciation has been estimated for each development separately by dividing the value of the accumulated depreciation (Table D.2-2) by the total plant cost (Table D.2-2). Applying these percentages to each reproduction cost (Table D.2-1) for the Yadkin Project developments, developed using the Index, suggests that an estimate of the fair value of the Yadkin Project in 2005 dollars is \$130,547,917.^{1,2} No allowance has been made for external or functional obsolescence. Adding \$130,547,917 to the original cost of the land within the Project, \$6,791,638; produces a total fair value estimate for the Project of \$137,339,555. It must be noted that the foregoing is a rough calculation of fair value and that more precise calculations using this methodology may be possible. The estimated fair value for the Yadkin Project, excluding Project land, is shown in Table D.2-1.

¹ Does not include the cost of equity.

² Note that this is not an appraisal value, and this calculation was not performed by a licensed appraiser.

Investments of \$44,000,000 are anticipated in the Project through the expiration of the existing license on April 30, 2008.

Table D.2-1: Estimated Fair Value of the Yadkin Project^{a,b}

Development	Reproduction Cost ^c	Estimated Physical Depreciation ^d	Estimated Fair Value
High Rock	\$88,184,714	(\$50,845,542)	\$37,339,172
Tuckertown	\$54,849,726	(\$41,504,239)	\$13,345,487
Narrows	\$203,553,370	(\$135,747,707)	\$67,805,663
Falls	\$51,836,097	(\$39,778,502)	\$12,057,595
Total	\$398,423,907	(\$267,875,990)	\$130,547,917

- a. No attempt has been made to determine the current fair market value of real estate, including improvements, within the Project.
- b. Anticipated capital investments into Project through expiration of existing license not included.
- c. Based on Handy-Whitman Cost Index, all dollars are 2005. Value includes transmission equipment included within the Project as defined.
- d. Does not include external or functional obsolescence.

D.2.2 Net Investment

The FPA generally defines a licensee’s “net investment” in a project as the original cost of the project plus additions and betterments, minus depreciation and other amounts (See 16 U.S.C. § 796(13)). APGI’s net investment in the Yadkin Project, as reflected in APGI’s Fixed Asset Listing as of 2005, was \$24,158,903 as shown in Table D.2-2.

Table D.2-2: Estimated Net Investment in the Yadkin Project^a

Development	Total Plant Cost ^b	Accumulated Depreciation ^c	Net Investment
High Rock	\$17,771,576	(\$10,246,813)	\$6,524,763
Tuckertown	\$16,979,919	(\$12,848,534)	\$4,131,386
Narrows	\$29,497,000	(\$19,671,270)	\$9,825,730
Falls	\$15,807,866	(\$12,130,843)	\$3,677,024
TOTAL COST	\$80,056,361	(\$55,897,460)	\$24,158,903

- a. Source: 2005 Fixed Asset Listing, from email from Lydia Gill dated 1/23/06.
- b. For each development, the total plant costs includes: development specific total plant costs and a prorated amount of total Project (a) substation, (b) administrative (c) property and (d) non-utility accumulated depreciation.
- c. For each development, the accumulated depreciation includes: development specific accumulated depreciation and a prorated amount of total Project (a) substation, (b) administrative (c) property and (d) non-utility accumulated depreciation.

D.2.3 Severance Damages

Under FPA § 14(a), “severance damages” are those “reasonable damages” to protect property not “caused by the severance there from of property taken” (See 16 U.S.C. § 807(a)). APGI believes that the severance damages inflicted by a takeover of the Yadkin Project would be significant. Given the inherent difficulties in attempting to quantify such speculative values, APGI reserves the right to submit additional evidence quantifying such severance damages should FERC consider ordering a takeover of the Project.

D.3 Estimated Cost of New Development Work

Per 18 CFR §4.30(b)(18), “new development costs” include any construction, installation, repair, reconstruction, or other change in the existing state of project works or appurtenant facilities, including any dredging and filling in project waters. For the purpose of this License Application, this includes the costs of turbine and generator upgrades and refurbishments as well as costs required to provide environmental mitigation or enhancement during the term of a new license.

APGI has conducted studies evaluating the turbine/generator refurbishment potential, as well as upgrades at the Project developments. APGI plans to refurbish and upgrade all Project units at High Rock, Tuckertown, and Falls under the new license, along with Narrows Units 1 and 3³.

The estimated capital costs of the planned refurbishments and upgrades are presented in Table D.3-1.

Table D.3-1: Estimated Capital Costs of Planned Refurbishments and Upgrades

Development	Total Estimated Cost^a
High Rock Units 1 - 3	\$ 36,000,000
Tuckertown Units 1 – 3	\$ 33,000,000
Narrows 1 and 3	\$ 32,000,000
Falls 1 - 3	\$ 29,000,000
Total	\$ 130,000,000

a. All dollars are 2005.

D.4 Estimated Average Annual Cost of the Project

The estimated annual costs of operating the Yadkin Project are presented in Table D.4-1. These cost are based on the existing operation of the Project with the planned refurbishments and upgrades, as described in Exhibit D.3, and do not include any estimates for anticipated changes in the future operation of the Project.

³ The upgrade of Narrows Unit 4 was completed in 2001, and Unit 2 will be completed prior to the expiration of the existing license in 2008.

Table D.4-1: Estimated Annual Project Operating Costs^a

Item	Amount
Cost of Capital (equity and debt) ^{b,c}	\$ 8,615,579
Property Taxes	\$ 849,043
Depreciation ^{b,c}	\$ 9,083,141
Operation & Maintenance ^c	\$ 9,296,093
FERC Administrative Fee ^d	\$ 466,241
Total	\$28,310,097

- a. All dollars are 2005. The Draft License Application Estimated Annual Operating Cost was \$13,000,000 and did not include the Cost of Capital (equity and debt). The Estimated Annual Operating Cost presented here includes the Cost of Capital (equity and debt) and increased depreciation due to proposed capital investments.
- b. Includes the cost of the refurbishment/upgrade of generating units (see Exhibit D.3, Estimated Cost of New Development Work).
- c. Does not include the additional cost due to APCI's proposed alternative (see Exhibit D.9, Estimated Average Annual Change in Project Generation and Value of Project Power Due to Changes in Project Operations).
- d. Average of Annual Charges for Fiscal Years 2003, 2004 and 2005 under 18 CFR Part 382; Annual Charges include FERC administrative charges and other federal agencies administrative charges, less FERC administrative charge adjustments.

D.5 Estimated Annual Value of Project Power

APGI estimates that the annual value of Project power produced is approximately \$43,600,000. To develop this estimate, APCI modeled the existing Project operations with the addition of proposed generating unit upgrades (see Exhibit D.3) in the Yadkin Project Operations Model, OASIS, for the 1930 to 2003 period of record using the average monthly on and off-peak energy values for 2004 presented below in Exhibit D.8. APCI does not represent in this estimate any indication of the future value of wholesale electric energy or Project production levels.

D.6 Sources and Extent of Financing and Annual Revenues

Because the proposed refurbishment and upgrade will extend over a twelve year period from 2009 through 2020, APCI expects that the Project's capital requirements will be financed internally.

D.7 Estimate of the Cost to Develop License Application

The approximate cost to develop the License Application for the Yadkin Project was \$20,000,000.

D.8 On-Peak and Off-Peak Values of Project Power

APGI calculated average monthly on-peak and off-peak energy values using a third-party developed index for southeast power sales. APGI has selected to use “Southern, Into” energy values. The “Southern, Into” energy values represent a compilation of daily values of peak and off-peak energy sold into the Southern Company Region for 2004, as reported by market participants to Platts, a McGraw-Hill company. Platts uses standard price reporting methodology, including FERC’s 2003 standards. From this daily data, APGI calculated average monthly on-peak and off-peak energy values as shown in Table D.8-1. Platts, as publisher of this index, has approved the use of the data in this License Application.

Table D.8-1: Monthly Average Energy Values

Month	On-Peak Value of Project Power (\$/MWh)	Off-Peak Value of Project Power (\$/MWh)
January	\$45.11	\$29.31
February	\$41.67	\$28.89
March	\$43.10	\$29.41
April	\$47.24	\$29.51
May	\$52.78	\$31.00
June	\$56.41	\$27.35
July	\$55.52	\$26.28
August	\$50.61	\$28.26
September	\$44.43	\$28.02
October	\$51.35	\$30.82
November	\$48.25	\$31.84
December	\$48.84	\$34.39
Average	\$48.78	\$29.59

D.9 Estimated Average Annual Change in Project Generation and Value of Project Power Due to Changes in Project Operations

In order to estimate the average annual decrease in Project generation and average annual decrease in value of Project power related to the proposed protection, mitigation and enhancement (PME) measures, APGI modeled the existing Project operations and proposed Project operations in OASIS. Separate calculations were performed to determine the generation losses associated with dissolved oxygen enhancements proposed for the High Rock and Narrows developments. Both operating scenarios were run for the 1930 to 2003 period of record using the average monthly on and off-peak energy values presented above in Exhibit D.8. The estimated average annual decrease in Project generation is 2,100 megawatt hours (MWh). The estimated average annual decrease in the value of Project power is \$770,000.

The estimated annual cost of operating the Project including the additional costs due to APGI's proposals for continued Project operation are presented in Table D.9-1.

Table D.9-1: Estimated Annual Project Operating Costs^a

Item	Amount
Cost of Capital (equity and debt) ^b	\$ 8,650,090
Property Taxes	\$ 849,043
Depreciation ^b	\$ 9,185,541
Operation & Maintenance ^b	\$ 9,856,576
FERC Administrative Fee ^c	\$ 466,241
Total	\$29,007,491

a. All dollars are 2005

b. Includes the additional cost due to APGI's proposed operations

c. Average of Annual Charges for Fiscal Years 2003, 2004 and 2005 under 18 CFR Part 382; Annual Charges include FERC administrative charges and other federal agencies administrative charges, less FERC administrative charge adjustments.