**FLORIDA PUBLIC SERVICE COMMISSION**

 **Capital Circle Office Center 2540 Shumard Oak Boulevard**

 **Tallahassee, Florida 32399-0850**

 **M E M O R A N D U M**

 **February 22, 1996**

**TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYO)**

**FROM: DIVISION OF AUDITING & FINANCIAL ANALYSIS (LEE, BASS, HICKS, LESTER, JOHNSON, MERTA)**

 **DIVISION OF ELECTRIC & GAS (WHEELER)**

 **DIVISION OF LEGAL SERVICES (ERSTLING)**

**RE: DOCKET NO. 950499-EI - TAMPA ELECTRIC Company - PETITION FOR APPROVAL OF 1995 DEPRECIATION STUDY BY TAMPA ELECTRIC Company**

**AGENDA: MARCH 5, 1996 - REGULAR AGENDA - PROPOSED AGENCY ACTION -INTERESTED PERSONS MAY PARTICIPATE**

**CRITICAL DATES: NONE**

**SPECIAL INSTRUCTIONS: I:\PSC\AFA\WP\950499.RCM**

 **DISCUSSION OF ISSUES**

**ISSUE :** Should the current depreciation rates and provision for dismantlement for Tampa Electric Company (TECO or Company) be changed?

**RECOMMENDATION:** Yes. A review of the Company's activity since the prior depreciation study, as well as current planning and provisions for dismantlement, indicate the need for revising depreciation rates and recovery schedules. (BASS, JOHNSON, LEE)

**STAFF ANALYSIS:** The study filed in this docket is the regular quadrennial depreciation study for TECO. The previous comprehensive study was filed on December 31, 1991, resulting in Order No. 25619. In addition to setting appropriate recovery provisions for TECO's investment effective January 1, 1991, that order required the Company to file revised site-specific depreciation studies by June 30, 1992 for Big Bend and Gannon Stations. Revised depreciation rates, based on that study, were ordered for the investment relating to those two sites, effective January 1, 1992.

 In this study, the Company has provided production plant investment stratified by Federal Energy Regulatory Commission (FERC) account for each unit at each steam generation site. Formerly, the breakdown of steam production plant investment was by unit for each site. As a result of this stratification of investment, recovery provisions can be more closely matched to the life characteristics of specific categories of the investment which has been made to provide for steam generation of electric power. Additionally, this study affords an opportunity to set appropriate recovery rates for the Polk Power Station, slated to come on line in late 1996. Taken together with changes in net plant balances and updated planning, a need for review and revision of recovery provisions is indicated.

 This study also provides an opportunity to review the accrual which has been undertaken to provide for the dismantlement of fossil fueled generation plants following the retirement of those installations. This matter is addressed in Issue 5.

**ISSUE 2:** What should be the implementation date of the recommended rates and schedules?

**RECOMMENDATION:** Staff recommends approval of the Company's proposed January 1, 1996, date of implementation for the depreciation rates and schedules. (BASS)

**STAFF ANALYSIS:** Company data and related calculations abut the January 1, 1996, date. This is the recommended date of implementation, being the earliest practicable date for utilizing the revised rates and schedules.

**ISSUE 3:** Should any corrective reserve allocations be made?

**RECOMMENDATION:** Yes. The reserves for production plant should be reallocated from the unit level to an account by unit level as shown on Attachment A, pages 12 through 14. (LEE)

**STAFF ANALYSIS:** Up to this time, the investment and depreciation accrual for production plant have been maintained for each unit at each site. Stratifying the investment (associated with each of those units into the appropriate FERC accounts) affords the opportunity to provide recovery more closely matched to the life characteristics of investment comprising each account.

 In the process of stratifying investment and developing remaining life rates by account by unit, TECO reallocated the total reserve for each unit among the constituent accounts. Each account's reserve was aligned with it's theoretical reserve, as developed using the rates and parameters proposed in the Company's originally filed study. Staff recommended reserves are not substantially different from those proposed by the Company; rather they are recommended as a refinement incorporating the depreciation parameters which have been agreed upon in the review process, as discussed further in Issue 4.

**ISSUE 4:** What are the appropriate depreciation rates and amortization schedules?

**RECOMMENDATION:** The Staff recommended lives, net salvages, reserves and resultant depreciation rates are shown on Attachment B, pages 15 through 19. Without including recovery for investment at the Polk Power Station, there is a projected decrease in annual depreciation expense of approximately $555,000, based on projected January 1, 1996, investments, as shown on Attachment C, pages 20 through 24. The annual capital recovery expense and provision for dismantlement relating to the Polk Power Station will be approximately $22 million. (LEE, BASS, JOHNSON)

**STAFF ANALYSIS:** Staff's recommendations are the result of a comprehensive review of the Company's submitted study. Attachment B shows a comparison of rate components (lives, salvages, and reserves). Investments and reserve amounts are estimated as of January 1, 1996. Attachment C, pages 20 through 24, shows the estimated resultant annual expenses.

 As a result of the review and analytical process, TECO and Staff have reached basic agreement on life and net salvage parameters recommended in this docket. There is some difference, however, in the Company proposed reserve allocations for production plant compared to those recommended by Staff, as discussed in Issue 3. Further, TECO has proposed that official communication equipment be amortized over 10 years with property records maintained on a vintage group basis. The Company notes that use of amortization is in line with Staff efforts to simplify the depreciation study process, where possible. Staff is amenable to the Company's proposal as it relates to communications equipment similar to that amortized by telecommunications companies. The remaining investment however, relates to fiber cable and associated electronics. While early generations of this technology can be impacted by refinements in the technology and in installation procedures, there is no reason to believe that subsequent generations will not experience longer lives than metallic cables. For this reason, Staff believes that this investment should continue to be studied for the determination of appropriate life and salvage characteristics. Staff's recommendation for Fiber Communication Equipment, Account 397.25, reflects a composite of a 20-year life for the fiber cable and a 7-year life for the associated electronics .

 A summary of the changes to the annual accrual based on January 1, 1996 estimated investments resulting from the recommended depreciation rates and provision for dismantlement are as follows:

 ($000)

 Rates:

 Production 21,301

 Transmission (252)

 Distribution (427)

 General (348)

 Total Rates 20,274

 Provision for Dismantlement 1,349

 Total Change in Annual Expenses 21,263

 The most significant changes are seen in the production plant area. In the previous study, depreciation rates were developed by unit for each generating plant. This study represents a further refinement with development of depreciation rates and allocation of reserves by account by unit by plant site. Further, the study provides the development of a depreciation rate for the Polk Power Plant scheduled to be in service in October, 1996.

 TECO has utilized its continuing property record system to develop stratified categories expected to have homogenous life characteristics. The life of the account is then arrived at by compositing the life expectations of the various strata. This approach provides a more accurate determination of the required depreciation components than the historical approach of arriving at the pattern of interim retirement and life expectancy of the generating plant without identifying the contents or quantifying the varying life characteristics of the contained assets.

 The life analysis for the Polk Power Plant has been based on the most recent project estimate and assigned lives to categories of plant consistent with like items of other production plants. A composite life at a plant site level is recommended pending a more detailed study at the next comprehensive review. Since Polk is expected to go in service in October of 1996, the projected impact of recommended rates for that investment is reduced to approximately $5 million for the year ending December 1996. The projected impact of the revised dismantlement accrual is about $337,000. As a result, total projected expense for TECO for 1996 is an increase of approximately $5 million.

 Except for the account relating to communication equipment as discussed above, the transmission, distribution and general plant accounts are basically status quo. In other words, recommended remaining lives simply reflect an update of each account's activity since the last review. Underlying service lives and mortality dispersions are still considered appropriate and reasonable.

**ISSUE 5:** Should the current approved annual accrual for dismantlement for Tampa Electric Company be revised?

**RECOMMENDATION:** No; the current approved annual accrual for dismantlement of facilities using fossil fuel should be continued for the next 4-year period. With the addition of Polk, the annual accrual will be $10,118,800. (LESTER, LEE)

**STAFF ANALYSIS:** In Docket No. 890186-EI, the Commission established the methodology for accruing the costs of fossil fuel dismantlement. (See Order No. 24741, issued July 1, 1991). Electric companies are required to file dismantlement studies at least once every four years in connection with their depreciation studies. The methodology depends on three factors: estimated base costs of dismantling the fossil fuel plants, projected inflation, and a contingency factor.

 TECO's preferred accrual is shown in the first column of Attachment D. This reflects maintaining the currently prescribed accrual level for all plants except for the Polk Power Station which is expected to come on-line in October 1996. The assumptions inherent in these currently prescribed accruals are base cost estimates resulting from a 1991 site specific dismantlement cost study, a 20% contingency factor and inflation indices based on the 1991 DRI Summer forecast. The proposed accrual for Polk reflects an estimate based on the cost estimates for Big Bend Unit No. 4 and the Big Bend Unit No. 4 FGD System, a 20% contingency factor and inflation indices based on the DRI Summer 1995 forecast. A site specific study for Polk will be included in the next dismantlement study.

 Since the last study, base cost estimates for the various dismantlement activities have changed. The 1991 dismantlement study indicated base cost estimates of $83.8 million; current cost estimates are $85.6 million. At Staff's request, TECO also provided an update using the most recent DRI inflation forecast and a lower contingency factor. However, the 16% factor, shown in the third column of Attachment D, is an FPL company specific factor not TECO specific. In Docket No. 941343-EI, FPL developed a weighted average contingency factor for the various tasks detailed in the Atomic Industrial Forum/National Environmental Studies Project report AIF/NESP-036, "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates" as they related to dismantlement activities. To this amount a 20% contingency factor was added for asbestos removal. The result was a 16% weighted average contingency factor specific to FPL. Staff does not believe that this 16% contingency factor is necessarily appropriate for TECO.

 Before the inclusion of Polk, the updated study (current base cost estimates, Summer 1995 DRI inflation forecast and a 20% contingency factor) shows an annual level accrual of $7,860,000, a decrease of $910,000 from the current annual accrual of $8,770,000. When one fourth of the $1,304,000 dismantlement accrual attributed to Polk is included in the calculation for 1996, the annual accrual is $8,186,000, still a slight decrease from the current accrual. In 1997, and thereafter, when the full amount attributable to Polk is included, the accrual will increase slightly above the current accrual to $9,164,000. The Commission approved the current annual accrual in Docket No. 910686-EI, Order No. 25619, issued January 21, 1992.

 TECO proposes no change in the currently approved annual accrual of $8,770,000 for fossil fuel plant dismantlement. Specifically, the Company states "with the uncertainties inherent in estimating the cost of dismantling a plant fifty years in the future, the company feels it is too early to begin to reduce accruals for this cost." Further, TECO believes that, if the effect of the decrease in inflation projections is recognized, the 20% contingency factor should be used to mitigate the reduction to the annual accrual for the reasons stated. The updated study shows increases in the base cost estimates of dismantling the fossil fuel plants but these increases have been more than offset by decreases in projected inflation for a net decrease of $910,000. (See the second column of Attachment D.)

 Staff believes that the possibility of under-accrual exists. National industry experience with dismantlement of fossil fuel plants is limited. Experience with estimating the base costs is even more limited. With the passage of time, estimating the costs of dismantlement likely will become more accurate. This case is part of only the second round of dismantlement studies for the major electric companies. As this round of reviews has progressed, Staff and the companies have refined the elements that go into the calculation of the base cost estimates of dismantlement and the calculation of the annual level accrual.

 In making this recommendation, Staff considered the alternative of reducing the annual accrual to agree with the updated base cost estimates, the DRI Summer 1995 inflation forecasts and a weighted contingency factor as used in the FPL review. This would be consistent with the methodology of determining dismantlement accruals that the Commission established by Order No. 24741, above, and subsequent reviews. However, there is little history by which to determine the adequacy of base cost estimation. Recognizing that base costs have increased by a very small amount, Staff is concerned about under-accrual and so recommends that the Commission not decrease the Companyy

The annual accrual for fossil fuel dismantlement of $8,770,000. The annual accrual will increase by $1,034,000 when Polk comes on-line.

**ISSUE 6:** Should the current amortization of investment tax credits (ITCs) and the flowback of excess deferred income taxes be revised to reflect the approved depreciation rates and recovery schedules?

**RECOMMENDATION:** Yes. The current amortization of ITCs and the flowback of excess deferred income taxes should be revised to reflect the approved depreciation rates and recovery schedules. Also, the utility should be required to file detailed calculations of the revised ITC amortization and flowback of excess deferred taxes at the same time it files its January 1996 surveillance report. (HICKS)

**STAFF ANALYSIS:** In issues previously addressed, Staff recommends revisions to TECO's depreciation rates and capital recovery schedules, to be effective January 1, 1996. Revising a utility's depreciation rates usually results in a change in its rate of ITC amortization and flowback of excess deferred income taxes.

 Section 46(f)(6) of the Internal Revenue Code (IRC) states that the amortization of ITCs should be determined by the period of time used in computing depreciation expense for purposes of reflecting regulated operating results of the utility. Since Staff is recommending a change in depreciation rates, it is also appropriate to change the amortization of ITCs.

 Section 203(e) of the Tax Reform Act of 1986 (TRA) prohibits rapid write-back of protected (depreciation related) deferred taxes. In addition, Rule 25-14.013, Accounting for Deferred Income Taxes under SFAS 109, Florida Administrative Code (F.A.C), prohibits, without good cause shown, excess deferred income taxes associated with temporary differences from being reversed any faster than allowed under Section 203(e). Therefore, both the TRA and Rule 25-14.013, F.A.C., prohibit faster write-off of protected excess deferred taxes. Consequently, Staff believes that the flowback of excess deferred taxes should be altered to comply with the TRA and Rule 25-14.013, F.A.C.

 The Company has submitted detailed workpapers quantifying the impact of the proposed depreciation rates on the amortization of ITCs and the flowback of excess deferred income taxes. Staff has reviewed the calculations and found them to be acceptable. However, the amounts reflected on the workpapers will change based on Staff's recommended depreciation rates.

 Staff recommends that the current amortization of ITCs and the flowback of excess deferred income taxes be revised to reflect the approved depreciation rates and recovery schedules. Also, the utility should be required to file detailed calculations of the revised ITC amortization and flowback of excess deferred taxes at the time it files its January 1996 surveillance report.

**ISSUE 7:** Should this docket be closed?

**RECOMMENDATION:** Yes. If no substantially affected person timely files a protest to the Commission's notice of proposed agency action, this docket should be closed. (BASS)

**STAFF ANALYSIS:** If no substantially affected person files a timely request for a Section 120.57, Florida Statutes, hearing within twenty-one days, no further action will be required and this docket should be closed.

 TAMPA ELECTRIC COMPANY

 STAFF RECOMMENDED

 RESTATED RESERVE

 1/1/96

 RESTATED

 ACCOUNT RESERVE

 $

 STEAM PRODUCTION

 BIG BEND STATION

 ‑ Common ‑

 311400 ‑ Structures 13,608,187

 312400 ‑ Boiler Plant 18,276,514

 314400 ‑ Turbogenerators 1,408,938

 315400 ‑ Access. Elec Eqpt. 5,098,343

 316400 ‑ Miscellaneous 1,735,272

 TOTAL 40,127,254

 ‑ Unit 1 ‑

 311410 ‑ Structures 2,995,771

 312410 ‑ Boiler Plant 20,940,563

 314410 ‑ Turbogenerators 10,763,875

 315410 ‑ Access. Elec. Eqpt. 3,805,745

 316410 ‑ Miscellaneous 264,736

 TOTAL 38,770,690

 ‑ Unit 2 ‑

 311420 ‑ Structures 2,504,676

 312420 ‑ Boiler Plant 18,838,351

 314420 ‑ Turbogenerators 9,690,590

 315420 ‑ Access. Elec. Eqpt. 3,136,106

 316420 ‑ Miscellaneous 170,730

 TOTAL 34,340,453

 ‑ Unit 3 ‑

 311430 ‑ Structures 6,330,812

 312430 ‑ Boiler Plant 38,065,478

 314430 ‑ Turbogenerators 16,886,281

 315430 ‑ Access. Elec. Eqpt. 8,063,343

 316430 ‑ Miscellaneous 311,016

 TOTAL 69,656,930

 ‑ Unit 4 ‑

 311440 ‑ Structures 18,229,870

 312440 ‑ Boiler Plant 46,840,707

 314440 ‑ Turbogenerators 25,663,858

 315440 ‑ Access. Elec. Eqpt. 11,223,899

 316440 ‑ Miscellaneous 2,000,748

 TOTAL 103,959,082

 ‑ Unit 4 FGD ‑

 311450 ‑ Structures 5,565,942

 312450 ‑ Boiler Plant 45,106,539

 315450 ‑ Access. Elec. Eqpt. 5,462,482

 316450 ‑ Miscellaneous 79,579

 TOTAL 56,214,542

 TOTAL BIG BEND STATION 343,068,951

 STEAM PRODUCTION (CONT'D)

 GANNON STATION

 ‑ Common ‑

 311500 ‑ Structures 10,051,659

 312500 ‑ Boiler Plant 5,392,081

 314500 ‑ Turbogenerators 427,617

 315500 ‑ Access. Elec. Eqpt. 1,339,897

 316500 ‑ Miscellaneous 1,642,868

 TOTAL 18,854,122

 ‑ Unit 1 ‑

 311510 ‑ Structures 1,956,255

 312510 ‑ Boiler Plant 7,023,120

 314510 ‑ Turbogenerators 5,867,962

 315510 ‑ Access. Elec. Eqpt. 1,516,013

 316510 ‑ Miscellaneous 219,558

 TOTAL 16,582,908

 ‑ Unit 2 ‑

 311520 ‑ Structures 1,864,168

 312520 ‑ Boiler Plant 6,334,013

 314520 ‑ Turbogenerators 7,007,721

 315520 ‑ Access. Elec. Eqpt. 1,040,281

 316520 ‑ Miscellaneous 59,727

 TOTAL 16,305,910

 ‑ Unit 3 ‑

 311530 ‑ Structures 1,431,245

 312530 ‑ Boiler Plant 10,933,947

 314530 ‑ Turbogenerators 7,975,955

 315530 ‑ Access. Elec. Eqpt. 1,503,928

 316530 ‑ Miscellaneous 89,069

 TOTAL 21,934,144

 ‑ Unit 4 ‑

 311540 ‑ Structures 971,906

 312540 ‑ Boiler Plant 9,035,049

 314540 ‑ Turbogenerators 6,000,641

 315540 ‑ Access. Elec. Eqpt. 1,302,628

 316540 ‑ Miscellaneous 34,582

 TOTAL 17,344,806

 ‑ Unit 5 ‑

 311550 ‑ Structures 1,548,389

 312550 ‑ Boiler Plant 12,754,799

 314550 ‑ Turbogenerators 5,776,887

 315550 ‑ Access. Elec. Eqpt. 2,261,916

 316550 ‑ Miscellaneous 111,926

 TOTAL 22,453,917

 ‑ Unit 6 ‑

 311560 ‑ Structures 2,133,836

 312560 ‑ Boiler Plant 18,828,348

 314560 ‑ Turbogenerators 7,557,822

 315560 ‑ Access. Elec. Eqpt. 2,792,549

 316560 ‑ Miscellaneous 176,937

 TOTAL 31,489,492

 TOTAL GANNON STATION 144,965,299

 STEAM PRODUCTION (CONT'D)

 GANNON OIL BACKOUT

 ‑ Common ‑ 20,543,288

 ‑ Unit 1 ‑ 14,902,090

 ‑ Unit 2 ‑ 14,506,218

 ‑ Unit 3 ‑ 17,203,050

 ‑ Unit 4 ‑ 18,678,325

 TOTAL OIL BACKOUT 85,832,971

 HOOKER'S POINT STATION 46,898,372

 DINNER LAKE STATION 3,039,727

 TOTAL STEAM PRODUCTION 623,805,320

 MISCELLANEOUS PRODUCTION

 311010 ‑ Structures & Improvements 2,515,405

 TOTAL MISCELLANEOUS PRODUCTION 2,515,405

 OTHER PRODUCTION

 BIG BEND STATION

 ‑ Combustion Turbine No. 1 ‑

 341410 ‑ Structures 79,304

 342410 ‑ Boiler Plant 117,995

 344410 ‑ Turbogenerator 1,160,824

 345410 ‑ Access. Elec. Eqpt. 162,519

 346410 ‑ Miscellaneous 3,251

 TOTAL 1,523,893

 ‑ Combustion Turbine No. 2 & 3 ‑

 341420 ‑ Structures 1,199,286

 342420 ‑ Boiler Plant 795,900

 344420 ‑ Turbogenerator 11,038,241

 345420 ‑ Access. Elec. Eqpt. 1,789,610

 346420 ‑ Miscellaneous 14,975

 TOTAL 14,838,012

 GANNON STATION

 ‑ Combustion Turbine No. 1 ‑

 341510 ‑ Structures 66,001

 342510 ‑ Boiler Plant 92,204

 344510 ‑ Turbogenerator 1,301,169

 345510 ‑ Access. Elec. Eqpt. 228,812

 TOTAL 1,688,186

 PHILLIPS STATION 31,997,042

 POLK POWER STATION 0

 TOTAL OTHER PRODUCTION 50,047,133

 TOTAL DEPRECIABLE PRODUCTION PLANT 676,367,858

 AMORTIZABLE PRODUCTION PLANT

 STEAM PROD. ‑‑ BIG BEND STATION 2,148,627

 STEAM PROD. ‑‑ GANNON STATION 1,152,623

 MISC. PROD. ‑ 316010 Misc. Power Plant Equipment 1,801,673

 MISC. PROD. ‑ 316170 Amort Power Plant Equipment 1,160,793

 TOTAL PRODUCTION PLANT 682,631,574

 TAMPA ELECTRIC COMPANY

 1995 STUDY

 COMPARISON OF RATES AND COMPONENTS

 C U R R E N T C O M P A N Y R E V I S E D P R O P O S A L S T A F F R E C O M M E N D A T I O N

 AVERAGE REMAINING AVERAGE REMAINING AVERAGE REMAINING

 REMAINING NET LIFE REMAINING NET LIFE REMAINING NET LIFE

 LIFE SALVAGE RATE LIFE SALVAGE RESERVE RATE LIFE SALVAGE RESERVE RATE

ACCOUNT (YRS.) (%) (%) (YRS.) (%) (%) (%) (YRS.) (%) (%) (%)

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BIG BEND STATION

 ‑ Common ‑

311400 ‑ Structures 32.0 (11) 2.4 35.0 (3.0) 30.92 2.1 35 (3) 32.31 2.0

312400 ‑ Boiler Plant 32.0 (11) 2.4 29.0 (17.0) 37.16 2.8 29 (17) 36.03 2.8

314400 ‑ Turbogenerators 32.0 (11) 2.4 35.0 (9.0) 42.89 1.9 35 (9) 42.71 1.9

315400 ‑ Access. Elec Eqpt. 32.0 (11) 2.4 18.7 (4.0) 40.44 3.4 18.7 (4) 40.17 3.4

316400 ‑ Miscellaneous 32.0 (11) 2.4 17.1 (17.0) 48.58 4.0 17.1 (17) 49.48 3.9

 ‑ Unit 1 ‑

311410 ‑ Structures 23.0 (11) 2.3 23.0 (3.0) 49.66 2.3 23 (3) 46.33 2.5

312410 ‑ Boiler Plant 23.0 (11) 2.3 23.0 (17.0) 42.94 3.2 23 (17) 41.85 3.3

314410 ‑ Turbogenerators 23.0 (11) 2.3 22.0 (9.0) 42.20 3.0 22 (9) 46.03 2.9

315410 ‑ Access. Elec. Eqpt. 23.0 (11) 2.3 23.0 (4.0) 37.49 2.9 23 (4) 37.98 2.9

316410 ‑ Miscellaneous 23.0 (11) 2.3 24.0 (17.0) 69.22 2.0 24 (17) 40.94 3.2

 ‑ Unit 2 ‑

311420 ‑ Structures 26.0 (11) 2.6 26.0 (3.0) 42.48 2.3 26 (3) 37.92 2.5

312420 ‑ Boiler Plant 26.0 (11) 2.6 23.0 (17.0) 43.00 3.2 23 (17) 43.31 3.2

314420 ‑ Turbogenerators 26.0 (11) 2.6 25.0 (9.0) 39.28 2.8 24 (9) 39.32 2.9

315420 ‑ Access. Elec. Eqpt. 26.0 (11) 2.6 22.0 (4.0) 33.96 3.2 22 (4) 35.73 3.1

316420 ‑ Miscellaneous 26.0 (11) 2.6 26.0 (17.0) 31.34 3.3 26 (17) 31.14 3.3

 ‑ Unit 3 ‑

311430 ‑ Structures 27.0 (11) 2.4 28.0 (3.0) 43.02 2.1 28 (3) 41.99 2.2

312430 ‑ Boiler Plant 27.0 (11) 2.4 26.0 (17.0) 47.58 2.7 25 (17) 46.33 2.8

314430 ‑ Turbogenerators 27.0 (11) 2.4 22.0 (9.0) 54.52 2.5 21 (9) 58.88 2.4

315430 ‑ Access. Elec. Eqpt. 27.0 (11) 2.4 23.0 (4.0) 39.66 2.8 22 (4) 39.41 2.9

316430 ‑ Miscellaneous 27.0 (11) 2.4 29.0 (17.0) 44.25 2.5 29 (17) 41.99 2.6

 ‑ Unit 4 ‑

311440 ‑ Structures 35.0 (11) 2.7 36.0 (3.0) 22.21 2.2 36 (3) 29.22 2.0

312440 ‑ Boiler Plant 35.0 (11) 2.7 25.0 (17.0) 29.38 3.5 25 (17) 23.94 3.7

314440 ‑ Turbogenerators 35.0 (11) 2.7 32.0 (9.0) 26.21 2.6 32 (9) 31.68 2.4

315440 ‑ Access. Elec. Eqpt. 35.0 (11) 2.7 28.0 (4.0) 27.27 2.7 28 (4) 31.43 2.6

316440 ‑ Miscellaneous 35.0 (11) 2.7 27.0 (17.0) 31.07 3.2 27 (17) 37.57 2.9

 ‑ Unit 4 FGD ‑

311450 ‑ Structures 34.0 (11) 2.5 35.0 (3.0) 25.31 2.2 35 (3) 26.23 2.2

312450 ‑ Boiler Plant 34.0 (11) 2.5 31.0 (17.0) 31.71 2.8 31 (17) 31.59 2.8

315450 ‑ Access. Elec. Eqpt. 34.0 (11) 2.5 29.0 (4.0) 30.05 2.6 29 (4) 29.96 2.6

316450 ‑ Miscellaneous 34.0 (11) 2.5 27.0 (17.0) 36.59 3.0 27 (17) 32.52 3.1

STEAM PRODUCTION (CONT'D)

GANNON STATION

 ‑ Common ‑

311500 ‑ Structures 22.0 (22) 3.7 20.7 (3.0) 31.84 3.4 21 (3) 33.61 3.3

312500 ‑ Boiler Plant 22.0 (22) 3.7 20.0 (17.0) 39.38 3.9 20 (17) 38.89 3.9

314500 ‑ Turbogenerators 22.0 (22) 3.7 26.1 (9.0) 30.40 3.0 26 (9) 25.73 3.2

315500 ‑ Access. Elec. Eqpt. 22.0 (22) 3.7 26.2 (4.0) 25.63 3.0 26 (4) 20.74 3.2

316500 ‑ Miscellaneous 22.0 (22) 3.7 13.7 (17.0) 54.61 4.6 13.7 (17) 52.46 4.7

 ‑ Unit 1 ‑

311510 ‑ Structures 12.9 (22) 3.3 11.3 (3.0) 78.87 2.1 11.3 (3) 75.18 2.5

312510 ‑ Boiler Plant 12.9 (22) 3.3 11.5 (17.0) 73.54 3.8 11.5 (17) 76.05 3.6

314510 ‑ Turbogenerators 12.9 (22) 3.3 10.9 (9.0) 77.12 2.9 10.9 (9) 76.61 3.0

315510 ‑ Access. Elec. Eqpt. 12.9 (22) 3.3 9.8 (4.0) 76.53 2.8 9.8 (4) 73.78 3.1

316510 ‑ Miscellaneous 12.9 (22) 3.3 11.4 (17.0) 102.34 1.3 11.4 (17) 86.40 2.7

 ‑ Unit 2 ‑

311520 ‑ Structures 13.0 (22) 3.7 12.2 (3.0) 65.13 3.1 12.2 (3) 65.72 3.1

312520 ‑ Boiler Plant 13.0 (22) 3.7 11.6 (17.0) 62.46 4.7 11.6 (17) 68.61 4.2

314520 ‑ Turbogenerators 13.0 (22) 3.7 12.7 (9.0) 69.87 3.1 12.7 (9) 65.20 3.4

315520 ‑ Access. Elec. Eqpt. 13.0 (22) 3.7 11.7 (4.0) 67.89 3.1 11.7 (4) 63.55 3.5

316520 ‑ Miscellaneous 13.0 (22) 3.7 12.4 (17.0) 95.41 1.7 12.4 (17) 78.76 3.1

 ‑ Unit 3 ‑

311530 ‑ Structures 15.9 (22) 3.8 13.7 (3.0) 73.65 2.1 13.7 (3) 64.98 2.8

312530 ‑ Boiler Plant 15.9 (22) 3.8 14.6 (17.0) 56.46 4.1 14.6 (17) 60.74 3.9

314530 ‑ Turbogenerators 15.9 (22) 3.8 12.8 (9.0) 72.29 2.9 12.8 (9) 68.09 3.2

315530 ‑ Access. Elec. Eqpt. 15.9 (22) 3.8 11.7 (4.0) 67.63 3.1 11.7 (4) 64.19 3.4

316530 ‑ Miscellaneous 15.9 (22) 3.8 10.0 (17.0) 91.32 2.6 10.0 (17) 84.87 3.2

 ‑ Unit 4 ‑

311540 ‑ Structures 14.3 (22) 3.4 17.0 (3.0) 64.90 2.2 17.0 (3) 56.55 2.7

312540 ‑ Boiler Plant 14.3 (22) 3.4 17.6 (17.0) 45.79 4.0 17.6 (17) 49.36 3.8

314540 ‑ Turbogenerators 14.3 (22) 3.4 14.2 (9.0) 75.08 2.4 14.2 (9) 69.22 2.8

315540 ‑ Access. Elec. Eqpt. 14.3 (22) 3.4 13.1 (4.0) 57.90 3.5 13.1 (4) 58.02 3.5

316540 ‑ Miscellaneous 14.3 (22) 3.4 17.0 (17.0) 79.57 2.2 17.0 (17) 69.10 2.8

 ‑ Unit 5 ‑

311550 ‑ Structures 19.0 (11) 3.4 19.0 (3.0) 48.43 2.9 19.0 (3) 42.95 3.2

312550 ‑ Boiler Plant 19.0 (11) 3.4 19.0 (17.0) 45.24 3.8 19.0 (17) 45.28 3.8

314550 ‑ Turbogenerators 19.0 (11) 3.4 19.0 (9.0) 43.52 3.4 19.0 (9) 44.92 3.4

315550 ‑ Access. Elec. Eqpt. 19.0 (11) 3.4 16.4 (4.0) 38.25 4.0 16.4 (4) 38.84 4.0

316550 ‑ Miscellaneous 19.0 (11) 3.4 22.0 (17.0) 39.70 3.5 22 (17) 31.92 3.9

 ‑Unit 6 ‑

311560 ‑ Structures 22.0 (11) 3.2 21.0 (3.0) 49.32 2.6 21 (3) 46.48 2.7

312560 ‑ Boiler Plant 22.0 (11) 3.2 20.0 (17.0) 43.44 3.7 20 (17) 45.10 3.6

314560 ‑ Turbogenerators 22.0 (11) 3.2 22.0 (9.0) 33.63 3.4 22 (9) 31.48 3.5

315560 ‑ Access. Elec. Eqpt. 22.0 (11) 3.2 16.4 (4.0) 43.69 3.7 16.4 (4) 42.89 3.7

316560 ‑ Miscellaneous 22.0 (11) 3.2 17.5 (17.0) 58.23 3.4 17.5 (17) 59.37 3.3

STEAM PRODUCTION (CONT'D)

GANNON OIL BACKOUT

‑ Common ‑ 5.0 18.7 (12) 66.00 2.5 18.7 (12) 46.88 3.5

‑ Unit 1 ‑ 5.0 11.4 (12) 56.27 4.9 11.4 (12) 78.96 2.9

‑ Unit 2 ‑ 5.0 12.3 (12) 54.45 4.7 12.3 (12) 68.77 3.5

‑ Unit 3 ‑ 5.0 14.5 (12) 59.20 3.6 14.5 (12) 68.67 3.0

‑ Unit 4 ‑ 5.0 17.0 (12) 63.49 2.9 17.0 (12) 59.36 3.1

HOOKER'S POINT STATION 50.0 (11) 2.2 7.5 (2) 89.16 1.7 7.5 (2) 89.16 1.7

DINNER LAKE STATION 35.0 (20) 3.4 8.7 (12) 82.16 3.4 8.7 (12) 82.16 3.4

MISCELLANEOUS PRODUCTION

311010 ‑ Structures & Improvements 25.0 (11) 3.3 21.0 (3.0) 37.68 3.1 21 (3) 37.68 3.1

OTHER PRODUCTION

BIG BEND STATION

 ‑ Combustion Turbine No. 1 ‑

341410 ‑ Structures 15.8 (11) 2.0 13.4 (3.0) 93.47 0.7 13.4 (3) 95.46 0.6

342410 ‑ Boiler Plant 15.8 (11) 2.0 13.4 (17.0) 78.86 2.8 13.4 (17) 103.81 1.0

344410 ‑ Turbogenerator 15.8 (11) 2.0 12.6 (9.0) 85.88 1.8 12.6 (9) 83.84 2.0

345410 ‑ Access. Elec. Eqpt. 15.8 (11) 2.0 13.4 (4.0) 94.49 0.7 13.4 (4) 93.11 0.8

346410 ‑ Miscellaneous 15.8 (11) 2.0 6.2 (17.0) 96.81 3.3 6.2 (17) 123.05 (1.0)

 ‑ Combustion Turbine No. 2 & 3 ‑

341420 ‑ Structures 11.7 (11) 4.4 5.4 (3.0) 84.38 3.4 5.4 (3) 83.72 3.6

342420 ‑ Boiler Plant 11.7 (11) 4.4 8.9 (17.0) 83.13 3.8 8.9 (17) 84.28 3.7

344420 ‑ Turbogenerator 11.7 (11) 4.4 9.9 (9.0) 70.90 3.8 9.9 (9) 69.81 4.0

345420 ‑ Access. Elec. Eqpt. 11.7 (11) 4.4 6.3 (4.0) 67.87 5.7 6.3 (4) 75.07 4.6

346420 ‑ Miscellaneous 11.7 (11) 4.4 6.4 (17.0) 93.02 3.7 6.4 (17) 89.99 4.2

OTHER PRODUCTION (CONT'D)

GANNON STATION

 ‑ Combustion Turbine No. 1 ‑

341510 ‑ Structures 15.8 (11) 1.6 13.4 (3.0) 98.84 0.3 13.4 (3) 87.58 1.2

342510 ‑ Boiler Plant 15.8 (11) 1.6 13.4 (17.0) 83.39 2.5 13.4 (17) 99.14 1.3

344510 ‑ Turbogenerator 15.8 (11) 1.6 13.4 (9.0) 92.77 1.2 13.4 (9) 93.81 1.1

345510 ‑ Access. Elec. Eqpt. 15.8 (11) 1.6 13.4 (4.0) 96.91 0.5 13.4 (4) 88.92 1.1

346510 ‑ Miscellaneous 15.8 (11) 1.6 0.0 (17.0) 0.00 0.0 ‑‑ (17) ‑‑ ‑‑

PHILLIPS STATION 28.0 (20) 4.3 15.4 (12.0) 53.66 3.8 15.4 (12) 53.66 3.8

POLK POWER STATION 26 (12.0) 0.00 4.3 26 (12) 0.00 4.3

AMORTIZABLE PRODUCTION PLANT

STEAM PROD. ‑‑ BIG BEND STATION 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION

STEAM PROD. ‑‑ GANNON STATION 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION

MISC. PROD. ‑ 316010 Misc. Power Plant Equipment 14.3 0 4.1 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION

MISC. PROD. ‑ 316170 Misc. Power Plant Equipment 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION 7 YEAR AMORTIZATION

TAMPA ELECTRIC COMPANY

 1995 STUDY

COMPARISON OF RATES AND COMPONENTS

 ACCOUNT CURRENT COMPANY PROPOSAL STAFF RECOMMENDATION

 AVERAGE REMAINING AVERAGE REMAINING AVERAGE REMAINING

 REMAINING NET LIFE REMAINING NET LIFE REMAINING NET LIFE

 LIFE SALVAGE RESERVE RATE LIFE SALVAGE RESERVE RATE LIFE SALVAGE RESERVE RATE

 (YRS.) (%) (%) (%) (YRS.) (%) (%) (%) (YRS.) (%) (%) (%)

TRANSMISSION

350 ‑ Land Rights 33.0 0.0 28.00 2.2 33.0 0.0 27.87 2.2 33.0 0.0 27.87 2.2

352 ‑ Structures and Improvements 37.0 (3.0) 20.65 2.2 39.0 (3.0) 22.39 2.1 39.0 (3.0) 22.39 2.1

353 ‑ Station Equipment 26.0 (15.0) 28.78 3.3 28.0 (15.0) 34.11 2.9 28.0 (15.0) 34.11 2.9

354 ‑ Towers and Fixtures 29.0 (15.0) 43.05 2.5 24.0 (15.0) 55.69 2.5 24.0 (15.0) 55.69 2.5

355 ‑ Poles and Fixtures 24.0 (30.0) 24.03 4.4 24.0 (35.0) 23.63 4.6 24.0 (35.0) 23.63 4.6

356 ‑ Overhead Conductors and Devices 24.0 (15.0) 35.20 3.3 24.0 (15.0) 33.76 3.4 24.0 (15.0) 33.76 3.4

356.01 ‑ Clearing Rights‑of‑Way 31.0 0.0 34.44 2.1 29.0 0.0 40.82 2.0 29.0 0.0 40.82 2.0

357 ‑ Underground Conduit 21.0 0.0 53.93 2.2 45.0 0.0 9.88 2.0 45.0 0.0 9.88 2.0

358 ‑ Underground Conductors & Devices 12.9 0.0 63.48 2.8 9.4 0.0 76.32 2.5 9.4 0.0 76.32 2.5

359 ‑ Roads and Trails 36.0 0.0 26.15 2.1 36.0 0.0 25.35 2.1 36.0 0.0 25.35 2.1

DISTRIBUTION

361 ‑ Structures and Improvements 31.0 (3.0) 28.38 2.4 29.0 (3.0) 33.14 2.4 29.0 (3.0) 33.14 2.4

362 ‑ Station Equipment 25.0 (15.0) 28.17 3.5 24.0 (15.0) 32.80 3.4 24.0 (15.0) 32.80 3.4

364 ‑ Poles, Towers, and Fixtures 23.0 (27.0) 26.47 4.4 26.0 (35.0) 30.29 4.0 26.0 (35.0) 30.29 4.0

365 ‑ Overhead Conductors and Devices 21.0 (8.0) 34.49 3.5 24.0 (20.0) 40.75 3.3 24.0 (20.0) 40.75 3.3

366 ‑ Underground Conduit 41.0 0.0 18.10 2.0 39.0 0.0 22.20 2.0 39.0 0.0 22.20 2.0

367 ‑ Underground Conductors & Devices 25.0 0.0 23.24 3.1 24.0 0.0 28.16 3.0 24.0 0.0 28.16 3.0

368 ‑ Line Transformers 10.3 30.0 27.25 4.2 9.3 30.0 34.03 3.9 9.3 30.0 34.03 3.9

369.01 ‑ Overhead Services 25.0 (5.0) 21.75 3.3 26.0 (50.0) 28.58 4.7 26.0 (50.0) 28.58 4.7

369.01 ‑ Underground Services 29.0 (15.0) 21.06 3.2 27.0 (15.0) 27.66 3.2 27.0 (15.0) 27.66 3.2

370 ‑ Meters 18.0 (19.0) 24.80 5.2 17.0 (20.0) 29.27 5.3 17.0 (20.0) 29.27 5.3

373 ‑ Street Lighting and Signal Systems 16.1 9.0 22.77 4.2 15.1 0.0 26.65 4.9 15.1 0.0 26.65 4.9

GENERAL PLANT

390 ‑ Structures and Improvements 31.0 (20.0) 16.87 3.3 29.0 (20.0) 20.35 3.4 29.0 (20.0) 20.35 3.4

392.1 ‑ Automobiles 3.0 20.0 42.38 12.5 2.7 24.0 16.09 22.2 2.7 24.0 16.09 22.2

392.2 ‑ Light Trucks 3.8 20.0 34.85 11.9 3.7 20.0 45.77 9.3 3.7 20.0 45.77 9.3

392.3 ‑ Heavy Trucks 9.1 25.0 31.14 4.8 9.3 20.0 41.66 4.1 9.3 20.0 41.66 4.1

393.01 ‑ Stores Equipment 21.0 0.0 39.99 2.9 18.3 0.0 54.21 2.5 18.3 0.0 54.21 2.5

394.01 ‑ Tools, Shop & Garage Equipment 7.1 5.0 67.48 3.9 8.2 5.0 52.75 5.2 8.2 5.0 52.75 5.2

395.01 ‑ Laboratory Equipment 21.0 0.0 31.72 3.3 17.6 0.0 47.38 3.0 17.6 0.0 47.38 3.0

396 ‑ Power Operated Equipment 11.0 10.0 55.93 3.1 8.8 10.0 56.77 3.8 8.8 10.0 56.77 3.8

397 ‑ Communication Equipment 5.9 0.0 34.49 11.1 10 Year Amortization 10 Year Amortization

397.01 ‑ Energy Management Systems 13.6 0.0 11.81 6.5 4.5 0.0 57.59 9.4 4.5 0.0 57.59 9.4

397.25 ‑ Communication Equipment ‑ Fiber 5.9 0.0 11.81 14.9 10 Year Amortization 11.4 (10.0) 38.45 6.3

391.01 ‑ Office Furniture and Equipment 7 Year Amortization 7 Year Amortization 7 Year Amortization

391.02 ‑ Computer Equipment 5 Year Amortization 5 Year Amortization 5 Year Amortization

393.00 ‑ Stores Equipment 7 Year Amortization 7 Year Amortization 7 Year Amortization

394.00 ‑ Tools, Shop and Garage Equipment 7 Year Amortization 7 Year Amortization 7 Year Amortization

395.00 ‑ Laboratory Equipment 7 Year Amortization 7 Year Amortization 7 Year Amortization

398.00 ‑ Miscellaneous Equipment 7 Year Amortization 7 Year Amortization 7 Year Amortization

 \*\*Denotes restated reserve

 TAMPA ELECTRIC COMPANY

 1995 STUDY

 COMPARISON OF EXPENSES

 C U R R E N T C O M P A N Y R E V I S E D P R O P O S A L S T A F F R E C O M M E N D A T I O N

 ESTIMATED ESTIMATED CHANGE

 INVESTMENT RESERVE IN

ACCOUNT 1/1/96 1/1/96 RATE EXPENSES RATE EXPENSES EXPENSES RATE EXPENSES EXPENSES

 (%) ($) (%) ($) ($) % $ $

STEAM PRODUCTION

BIG BEND STATION

 ‑ Common ‑

311400 ‑ Structures 42,121,057 13,608,187 2.4 1,010,905 2.1 884,542 (126,363) 2 842,421 (168,484)

312400 ‑ Boiler Plant 50,724,583 18,276,514 2.4 1,217,390 2.8 1,420,288 202,898 2.8 1,420,288 202,898

314400 ‑ Turbogenerators 3,298,742 1,408,938 2.4 79,170 1.9 62,676 (16,494) 1.9 62,676 (16,494)

315400 ‑ Access. Elec Eqpt. 12,691,729 5,098,343 2.4 304,601 3.4 431,519 126,918 3.4 431,519 126,918

316400 ‑ Miscellaneous 3,507,053 1,735,272 2.4 84,169 4 140,282 56,113 3.9 136,775 52,606

 ‑ Unit 1 ‑

311410 ‑ Structures 6,465,777 2,995,771 2.3 148,713 2.3 148,713 0 2.5 161,644 12,931

312410 ‑ Boiler Plant 50,034,557 20,940,563 2.3 1,150,795 3.2 1,601,106 450,311 3.3 1,651,140 500,345

314410 ‑ Turbogenerators 23,385,883 10,763,875 2.3 537,875 3 701,576 163,701 2.9 678,191 140,316

315410 ‑ Access. Elec. Eqpt. 10,019,691 3,805,745 2.3 230,453 2.9 290,571 60,118 2.9 290,571 60,118

316410 ‑ Miscellaneous 646,712 264,736 2.3 14,874 2 12,934 (1,940) 3.2 20,695 5,821

 ‑ Unit 2 ‑

311420 ‑ Structures 6,604,619 2,504,676 2.6 171,720 2.3 151,906 (19,814) 2.5 165,115 (6,605)

312420 ‑ Boiler Plant 43,494,360 18,838,351 2.6 1,130,853 3.2 1,391,820 260,967 3.2 1,391,820 260,967

314420 ‑ Turbogenerators 24,645,281 9,690,590 2.6 640,777 2.8 690,068 49,291 2.9 714,713 73,936

315420 ‑ Access. Elec. Eqpt. 8,777,837 3,136,106 2.6 228,224 3.2 280,891 52,667 3.1 272,113 43,889

316420 ‑ Miscellaneous 548,322 170,730 2.6 14,256 3.3 18,095 3,839 3.3 18,095 3,839

 ‑ Unit 3 ‑

311430 ‑ Structures 15,075,910 6,330,812 2.4 361,822 2.1 316,594 (45,228) 2.2 331,670 (30,152)

312430 ‑ Boiler Plant 82,156,385 38,065,478 2.4 1,971,753 2.7 2,218,222 246,469 2.8 2,300,379 328,626

314430 ‑ Turbogenerators 28,677,246 16,886,281 2.4 688,254 2.5 716,931 28,677 2.4 688,254 0

315430 ‑ Access. Elec. Eqpt. 20,458,936 8,063,343 2.4 491,014 2.8 572,850 81,836 2.9 593,309 102,295

316430 ‑ Miscellaneous 740,640 311,016 2.4 17,775 2.5 18,516 741 2.6 19,257 1,482

 ‑ Unit 4 ‑

311440 ‑ Structures 62,381,029 18,229,870 2.7 1,684,288 2.2 1,372,383 (311,905) 2 1,247,621 (436,667)

312440 ‑ Boiler Plant 195,629,688 46,840,707 2.7 5,282,002 3.5 6,847,039 1,565,037 3.7 7,238,298 1,956,296

314440 ‑ Turbogenerators 81,011,780 25,663,858 2.7 2,187,318 2.6 2,106,306 (81,012) 2.4 1,944,283 (243,035)

315440 ‑ Access. Elec. Eqpt. 35,706,700 11,223,899 2.7 964,081 2.7 964,081 0 2.6 928,374 (35,707)

316440 ‑ Miscellaneous 5,324,966 2,000,748 2.7 143,774 3.2 170,399 26,625 2.9 154,424 10,650

 ‑ Unit 4 FGD ‑

311450 ‑ Structures 21,221,962 5,565,942 2.5 530,549 2.2 466,883 (63,666) 2.2 466,883 (63,666)

312450 ‑ Boiler Plant 142,790,572 45,106,539 2.5 3,569,764 2.8 3,998,136 428,372 2.8 3,998,136 428,372

315450 ‑ Access. Elec. Eqpt. 18,234,179 5,462,482 2.5 455,854 2.6 474,089 18,235 2.6 474,089 18,235

316450 ‑ Miscellaneous 244,694 79,579 2.5 6,117 3 7,341 1,224 3.1 7,586 1,469

 TOTAL BIG BEND STATION 996,620,890 343,068,951 25,319,140 28,476,757 3,157,617 28,650,339 3,331,199

STEAM PRODUCTION (CONT'D)

GANNON STATION

 ‑ Common ‑

311500 ‑ Structures 29,910,870 10,051,659 3.7 1,106,702 3.4 1,016,970 (89,732) 3.3 987,059 (119,643)

312500 ‑ Boiler Plant 13,864,779 5,392,081 3.7 512,997 3.9 540,726 27,729 3.9 540,726 27,729

314500 ‑ Turbogenerators 1,662,098 427,617 3.7 61,498 3 49,863 (11,635) 3.2 53,187 (8,311)

315500 ‑ Access. Elec. Eqpt. 6,459,954 1,339,897 3.7 239,018 3 193,799 (45,219) 3.2 206,719 (32,299)

316500 ‑ Miscellaneous 3,131,523 1,642,868 3.7 115,866 4.6 144,050 28,184 4.7 147,182 31,316

 ‑ Unit 1 ‑

311510 ‑ Structures 2,602,102 1,956,255 3.3 85,869 2.1 54,644 (31,225) 2.5 65,053 (20,816)

312510 ‑ Boiler Plant 9,235,039 7,023,120 3.3 304,756 3.8 350,931 46,175 3.6 332,461 27,705

314510 ‑ Turbogenerators 7,659,040 5,867,962 3.3 252,748 2.9 222,112 (30,636) 3 229,771 (22,977)

315510 ‑ Access. Elec. Eqpt. 2,054,670 1,516,013 3.3 67,804 2.8 57,531 (10,273) 3.1 63,695 (4,109)

316510 ‑ Miscellaneous 254,128 219,558 3.3 8,386 1.3 3,304 (5,082) 2.7 6,861 (1,525)

 ‑ Unit 2 ‑

311520 ‑ Structures 2,836,621 1,864,168 3.7 104,955 3.1 87,935 (17,020) 3.1 87,935 (17,020)

312520 ‑ Boiler Plant 9,231,357 6,334,013 3.7 341,560 4.7 433,874 92,314 4.2 387,717 46,157

314520 ‑ Turbogenerators 10,747,571 7,007,721 3.7 397,660 3.1 333,175 (64,485) 3.4 365,417 (32,243)

315520 ‑ Access. Elec. Eqpt. 1,636,932 1,040,281 3.7 60,566 3.1 50,745 (9,821) 3.5 57,293 (3,273)

316520 ‑ Miscellaneous 75,834 59,727 3.7 2,806 1.7 1,289 (1,517) 3.1 2,351 (455)

 ‑ Unit 3 ‑

311530 ‑ Structures 2,202,515 1,431,245 3.8 83,696 2.1 46,253 (37,443) 2.8 61,670 (22,026)

312530 ‑ Boiler Plant 18,001,574 10,933,947 3.8 684,060 4.1 738,065 54,005 3.9 702,061 18,001

314530 ‑ Turbogenerators 11,714,241 7,975,955 3.8 445,141 2.9 339,713 (105,428) 3.2 374,856 (70,285)

315530 ‑ Access. Elec. Eqpt. 2,342,879 1,503,928 3.8 89,029 3.1 72,629 (16,400) 3.4 79,658 (9,371)

316530 ‑ Miscellaneous 104,950 89,069 3.8 3,988 2.6 2,729 (1,259) 3.2 3,358 (630)

 ‑ Unit 4 ‑

311540 ‑ Structures 1,718,758 971,906 3.4 58,438 2.2 37,813 (20,625) 2.7 46,406 (12,032)

312540 ‑ Boiler Plant 18,303,944 9,035,049 3.4 622,334 4 732,158 109,824 3.8 695,550 73,216

314540 ‑ Turbogenerators 8,668,427 6,000,641 3.4 294,727 2.4 208,042 (86,685) 2.8 242,716 (52,011)

315540 ‑ Access. Elec. Eqpt. 2,245,260 1,302,628 3.4 76,339 3.5 78,584 2,245 3.5 78,584 2,245

316540 ‑ Miscellaneous 50,046 34,582 3.4 1,702 2.2 1,101 (601) 2.8 1,401 (301)

 ‑ Unit 5 ‑

311550 ‑ Structures 3,605,278 1,548,389 3.4 122,579 2.9 104,553 (18,026) 3.2 115,369 (7,210)

312550 ‑ Boiler Plant 28,169,318 12,754,799 3.4 957,757 3.8 1,070,434 112,677 3.8 1,070,434 112,677

314550 ‑ Turbogenerators 12,860,275 5,776,887 3.4 437,249 3.4 437,249 0 3.4 437,249 0

315550 ‑ Access. Elec. Eqpt. 5,823,473 2,261,916 3.4 197,998 4 232,939 34,941 4 232,939 34,941

316550 ‑ Miscellaneous 350,652 111,926 3.4 11,922 3.5 12,273 351 3.9 13,675 1,753

 ‑ Unit 6 ‑

311560 ‑ Structures 4,590,509 2,133,836 3.2 146,896 2.6 119,353 (27,543) 2.7 123,944 (22,952)

312560 ‑ Boiler Plant 41,745,273 18,828,348 3.2 1,335,849 3.7 1,544,575 208,726 3.6 1,502,830 166,981

314560 ‑ Turbogenerators 24,008,318 7,557,822 3.2 768,266 3.4 816,283 48,017 3.5 840,291 72,025

315560 ‑ Access. Elec. Eqpt. 6,510,375 2,792,549 3.2 208,332 3.7 240,884 32,552 3.7 240,884 32,552

316560 ‑ Miscellaneous 298,023 176,937 3.2 9,537 3.4 10,133 596 3.3 9,835 298

 294,676,606 144,965,299 10,219,030 10,386,711 167,681 10,407,137 188,107

STEAM PRODUCTION (CONT'D)

GANNON OIL BACKOUT

‑ Common ‑ 43,818,293 20,543,288 5 2,190,915 2.5 1,095,457 (1,095,458) 3.5 1,533,640 (657,275)

‑ Unit 1 ‑ 18,873,074 14,902,090 5 943,654 4.9 924,781 (18,873) 2.9 547,319 (396,335)

‑ Unit 2 ‑ 21,092,364 14,506,218 5 1,054,618 4.7 991,341 (63,277) 3.5 738,233 (316,385)

‑ Unit 3 ‑ 25,053,513 17,203,050 5 1,252,676 3.6 901,926 (350,750) 3 751,605 (501,071)

‑ Unit 4 ‑ 31,468,017 18,678,325 5 1,573,401 2.9 912,572 (660,829) 3.1 975,509 (597,892)

 TOTAL OIL BACKOUT 140,305,261 85,832,971 7,015,264 4,826,077 (2,189,187) 4,546,306 (2,468,958)

HOOKER'S POINT STATION 52,601,551 46,898,372 2.2 1,157,234 1.7 894,226 (263,008) 1.7 894,226 (263,008)

DINNER LAKE STATION 3,699,556 3,039,727 3.4 125,785 3.4 125,785 0 3.4 125,785 0

 TOTAL STEAM PRODUCTION 1,487,903,864 623,805,320 43,836,453 44,709,556 873,103 44,623,793 787,340

MISCELLANEOUS PRODUCTION

311010 ‑ Structures & Improvements 6,676,569 2,515,405 3.3 220,327 3.1 206,974 (13,353) 3.1 206,974 (13,353)

 TOTAL MISCELLANEOUS PRODUCTION 6,676,569 2,515,405 220,327 206,974 (13,353) 206,974 (13,353)

OTHER PRODUCTION

BIG BEND STATION

‑ Combustion Turbine No. 1 ‑

341410 ‑ Structures 83,072 79,304 2 1,661 0.7 582 (1,079) 0.6 498 (1,163)

342410 ‑ Boiler Plant 113,663 117,995 2 2,273 2.8 3,183 910 1 1,137 (1,136)

344410 ‑ Turbogenerator 1,384,582 1,160,824 2 27,692 1.8 24,922 (2,770) 2 27,692 0

345410 ‑ Access. Elec. Eqpt. 174,543 162,519 2 3,491 0.7 1,222 (2,269) 0.8 1,396 (2,095)

346410 ‑ Miscellaneous 2,642 3,251 2 53 3.3 87 34 ‑1 (26) (79)

‑ Combustion Turbine No. 2 & 3 ‑

341420 ‑ Structures 1,432,475 1,199,286 4.4 63,029 3.4 48,704 (14,325) 3.6 51,569 (11,460)

342420 ‑ Boiler Plant 944,348 795,900 4.4 41,551 3.8 35,885 (5,666) 3.7 34,941 (6,610)

344420 ‑ Turbogenerator 15,812,806 11,038,241 4.4 695,763 3.8 600,887 (94,876) 4 632,512 (63,251)

345420 ‑ Access. Elec. Eqpt. 2,384,066 1,789,610 4.4 104,899 5.7 135,892 30,993 4.6 109,667 4,768

346420 ‑ Miscellaneous 16,640 14,975 4.4 732 3.7 616 (116) 4.2 699 (33)

OTHER PRODUCTION (CONT'D)

GANNON STATION

‑ Combustion Turbine No. 1 ‑

341510 ‑ Structures 75,362 66,001 1.6 1,206 0.3 226 (980) 1.2 904 (302)

342510 ‑ Boiler Plant 93,008 92,204 1.6 1,488 2.5 2,325 837 1.3 1,209 (279)

344510 ‑ Turbogenerator 1,387,006 1,301,169 1.6 22,192 1.2 16,644 (5,548) 1.1 15,257 (6,935)

345510 ‑ Access. Elec. Eqpt. 257,335 228,812 1.6 4,117 0.5 1,287 (2,830) 1.1 2,831 (1,286)

346510 ‑ Miscellaneous 0 0 1.6 0 0 0 0 ‑‑ 0 0

PHILLIPS STATION 59,626,801 31,997,042 4.3 2,563,952 3.8 2,265,818 (298,134) 3.8 2,265,818 (298,134)

POLK POWER STATION 484,400,000 0 4.3 20,829,200 20,829,200 4.3 20,829,200 20,829,200

 TOTAL OTHER PRODUCTION 568,188,349 50,047,133 3,534,099 23,967,480 20,433,381 23,975,304 20,441,205

TOTAL DEPRECIABLE PRODUCTION PLANT 2,062,768,782 676,367,858 47,590,879 68,884,010 21,293,131 68,806,071 21,215,192

AMORTIZABLE PRODUCTION PLANT

STEAM PROD. ‑‑ BIG BEND STATION 3,407,559 2,148,627 7 YR AMORT 487,281 7 YR AMRT 487,281 0 7 YR AMRT 487,281 0

STEAM PROD. ‑‑ GANNON STATION 1,990,267 1,152,623 7 YR AMORT 284,608 7 YR AMRT 284,608 0 7 YR AMRT 284,608 0

MISC. PROD. ‑ 316010 Misc. Power Plant Equipment 3,366,124 1,801,673 4.1 138,011 7 YR AMRT 223,717 85,706 7 YR AMRT 223,717 85,706

MISC. PROD. ‑ 316010 Misc. Power Plant Equipment 1,997,953 1,160,793 7 YR AMORT 285,707 7 YR AMRT 285,707 0 7 YR AMRT 285,707 0

TOTAL AMORTIZABLE PRODUCTION PLANT 10,761,903 6,263,716 1,195,607 1,281,313 85,706 1,281,313 85,706

 TOTAL PRODUCTION PLANT 2,073,530,685 682,631,574 48,786,486 70,165,323 21,378,837 70,087,384 21,300,898

TAMPA ELECTRIC COMPANY

1995 STUDY

COMPARISON OF EXPENSES

 CURRENT COMPANY REVISED PROPOSAL STAFF RECOMMENDATION

 ESTIMATED ESTIMATED CHANGE CHANGE

 ACCOUNT INVESTMENT RESERVE IN IN

 1/1/96 1/1/96 RATE EXPENSES RATE EXPENSES EXPENSES RATE EXPENSES EXPENSES

 (%) ($) (%) ($) ($) (%) ($) ($)

TRANSMISSION PLANT

 350 ‑ Land Rights 4,284,474 1,194,058 2.2 94,258 2.2 94,258 0 2.2 94,258 0

 352 ‑ Structures and Improvements 1,308,745 293,067 2.2 28,792 2.1 27,484 (1,308) 2.1 27,484 (1,308)

 353 ‑ Station Equipment 101,027,203 34,464,399 3.3 3,333,898 2.9 2,929,789 (404,109) 2.9 2,929,789 (404,109)

 354 ‑ Towers and Fixtures 4,342,275 2,418,394 2.5 108,557 2.5 108,557 0 2.5 108,557 0

 355 ‑ Poles and Fixtures 56,702,156 13,399,544 4.4 2,494,895 4.6 2,608,299 113,404 4.6 2,608,299 113,404

 356 ‑ Overhead Conductors and Devices 56,835,865 19,188,198 3.3 1,875,584 3.4 1,932,419 56,835 3.4 1,932,419 56,835

 356.01 ‑ Clearing Rights‑of‑Way 1,820,514 743,050 2.1 38,231 2 36,410 (1,821) 2 36,410 (1,821)

 357 ‑ Underground Conduit 6,203,994 613,051 2.2 136,488 2 124,080 (12,408) 2 124,080 (12,408)

 358 ‑ Underground Conductors & Devices 931,348 710,788 2.8 26,078 2.5 23,284 (2,794) 2.5 23,284 (2,794)

 359 ‑ Roads and Trails 2,360,433 598,276 2.1 49,569 2.1 49,569 0 2.1 49,569 0

 Total Transmission Plant 235,817,006 73,622,825 8,186,350 7,934,149 (252,201) 7934149 (252,201)

DISTRIBUTION PLANT

 361 ‑ Structures and Improvements 698,706 231,564 2.4 16,769 2.4 16,769 0 2.4 16,769 0

 362 ‑ Station Equipment 93,824,723 30,771,801 3.5 3,283,865 3.4 3,190,041 (93,824) 3.4 3,190,041 (93,824)

 364 ‑ Poles, Towers, and Fixtures 106,231,622 32,177,160 4.4 4,674,191 4 4,249,265 (424,926) 4 4,249,265 (424,926)

 365 ‑ Overhead Conductors and Devices 132,373,718 53,940,955 3.5 4,633,080 3.3 4,368,333 (264,747) 3.3 4,368,333 (264,747)

 366 ‑ Underground Conduit 61,420,490 13,636,372 2 1,228,410 2 1,228,410 0 2 1,228,410 0

 367 ‑ Underground Conductors & Devices 76,626,435 21,579,747 3.1 2,375,419 3 2,298,793 (76,626) 3 2,298,793 (76,626)

 368 ‑ Line Transformers 201,378,222 68,522,400 4.2 8,457,885 3.9 7,853,751 (604,134) 3.9 7,853,751 (604,134)

 369.01 ‑ Overhead Services 41,225,145 11,781,543 3.3 1,360,430 4.7 1,937,582 577,152 4.7 1,937,582 577,152

 369.01 ‑ Underground Services 39,456,265 10,914,024 3.2 1,262,600 3.2 1,262,600 0 3.2 1,262,600 0

 370 ‑ Meters 37,302,287 10,919,315 5.2 1,939,719 5.3 1,977,021 37,302 5.3 1,977,021 37,302

 373 ‑ Street Lighting and Signal Systems 60,394,836 16,096,222 4.2 2,536,583 4.9 2,959,347 422,764 4.9 2,959,347 422,764

 Total Distribution Plant 850,932,449 270,571,103 31,768,951 31,341,912 (427,039) 31,341,912 (427,039)

GENERAL PLANT

 390 ‑ Structures and Improvements 56,256,971 11,446,229 3.3 1,856,480 3.4 1,912,737 56,257 3.4 1,912,737 56,257

 392.1 ‑ Automobiles 961,475 447,298 12.5 120,184 22.2 213,447 93,263 22.2 213,447 93,263

 392.2 ‑ Light Trucks 5,820,499 3,196,894 11.9 692,639 9.3 541,306 (151,333) 9.3 541,306 (151,333)

 392.3 ‑ Heavy Trucks 26,926,179 9,483,265 4.8 1,292,457 4.1 1,103,973 (188,484) 4.1 1,103,973 (188,484)

 393.01 ‑ Stores Equipment 578,179 313,411 2.9 16,767 2.5 14,454 (2,313) 2.5 14,454 (2,313)

 394.01 ‑ Tools, Shop & Garage Equipment 728,812 384,469 3.9 28,424 5.2 37,898 9,474 5.2 37,898 9,474

 395.01 ‑ Laboratory Equipment 1,198,928 568,059 3.3 39,565 3.0 35,968 (3,597) 3.0 35,968 (3,597)

 396 ‑ Power Operated Equipment 872,854 495,488 3.1 27,058 3.8 33,168 6,110 3.8 33,168 6,110

 397 ‑ Communication Equipment 48,344,980 23,531,707 11.1 5,366,293 10 Yr. Amort. 4,834,498 (531,795) 10 Yr. Amort. 4,834,498 (531,795)

 397.01 ‑ Energy Management Systems 33,582,172 19,339,617 6.5 2,182,841 9.4 3,156,724 973,883 9.4 3,156,724 973,883

 397.25 ‑ Communication Equipment ‑ Fiber 7,078,287 2,721,399 14.9 1,054,665 10 Yr. Amort. 707,828.7 (346,836) 6.3 445,932 (608,733)

 Subtotal 182,349,337 71,927,836 12,677,373 12,592,002 (85,371) 12,330,105 (347,268)

 391.01 ‑ Office Furniture and Equipment 4,943,992 2,745,749 7 Yr Amort. 706,991 7 Yr Amort. 706,991 0 7 Yr Amort. 706,991 0

 391.02 ‑ Computer Equipment 17,578,819 11,027,104 5 Yr Amort. 3,515,764 5 Yr Amort. 3,515,764 0 5 Yr Amort. 3,515,764 0

 393.00 ‑ Stores Equipment 129,403 77,675 7 Yr Amort. 18,505 7 Yr Amort. 18,505 0 7 Yr Amort. 18,505 0

 394.00 ‑ Tools, Shop and Garage Equipment 3,207,858 1,680,791 7 Yr Amort. 458,724 7 Yr Amort. 458,724 0 7 Yr Amort. 458,724 0

 395.00 ‑ Laboratory Equipment 899,696 353,203 7 Yr Amort. 128,657 7 Yr Amort. 128,657 0 7 Yr Amort. 128,657 0

 398.00 ‑ Miscellaneous Equipment 475,552 152,459 7 Yr Amort. 68,004 7 Yr Amort. 68,004 0 7 Yr Amort. 68,004 0

 Subtotal 27,235,320 16,036,981 4,896,645 4,896,645 0 4,896,645 0

 Total General Plant 209,584,657 87,964,817 17,574,018 17,488,647 (85,371) 17,226,750 (347,268)

 Total Transmission, Distribution, General Plant 1,296,334,112 432,158,746 57,529,319 56,764,708 (764,611) 56,502,811 (1,026,508)

 Total Production Plant 2,073,530,685 682,631,574 48,786,486 70,165,323 21,378,837 70,087,384 21,300,898

 TOTAL DEPRECIABLE PLANT 3,369,864,797 1,114,790,320 106,315,805 126,930,031 20,614,226 126,590,195 20,274,390

Tampa Electric Company Attachment D

Production Dismantlement Study Page 1 of 1

Estimate as of 12/31/94

 Current DRI + 20% DRI + 16%

 Annual Annual Annual

 Accrual Accrual Accrual

Big Bend Common 533,188.00 493,340.00 476,083.00

Big Bend Unit No. 1 906,800.00 798,108.00 769,273.00

Big Bend Unit No. 2 606,322.00 559,615.00 539,661.00

Big Bend Unit No. 3 543,937.00 518,080.00 499,742.00

Big Bend Unit No. 4 1,019,485.00 980,164.00 944,798.00

Big Bend Unit No. 4 FGD 449,632.00 392,733.00 378,526.00

Gannon Common 362,504.00 467,917.00 450,742.00

Gannon Unit No. 1 812,947.00 729,975.00 698,991.00

Gannon Unit No. 2 637,700.00 555,348.00 532,059.00

Gannon Unit No. 3 628,587.00 551,895.00 529,456.00

Gannon Unit No. 4 535,371.00 467,277.00 448,873.00

Gannon Unit No. 5 496,041.00 434,039.00 417,215.00

Gannon Unit No. 6 488,561.00 441,189.00 424,344.00

Hookers Point 570,969.00 207,139.00 170,325.00

Dinner Lake 41,982.00 46,673.00 44,676.00

Big Bend CT No. 1, 2 & 3 26,622.00 82,269.00 79,203.00

Gannon CT No. 1 5,465.00 18,787.00 18,102.00

Phillips Station 103,923.00 115,406.00 110,971.00

Total 8,770,036.00 7,859,954.00 7,533,040.00

Polk Power Station 1,348,764.00 1,348,764.00 1,303,805.00

Total 10,118,800.00 9,208,718.00 8,836,845.00

Note: Current Annual Accrual reflects current annual accruals for all units and

 proposed annual accrual for Polk Power Station including contingency

 of 20%.