

146. The uranium ( $U_3O_8$ ) utilized as nuclear fuel at RBNS during the reconciliation period was purchased primarily under long-term contracts executed in the 1970's. During the 1970's, fuel-grade uranium was in short supply and the price of uranium was therefore high.

147. EGS made the purchases of the uranium in the core-in-service at RBNS, along with all other nuclear fuel cycle services, on behalf of CEPCO. The Commission previously considered these nuclear fuel contracts and expenses for RBNS nuclear fuel and found them to be reasonable in Docket No. 10894.

148. The parties in that proceeding are identical to the parties in this proceeding and the issue of the reasonableness of EGS's nuclear fuel costs based on the 1970s long-term uranium contracts was fully and fairly litigated. Docket No. 10894 was EGS's last fully-contested fuel reconciliation.

149. With the exception of reactor operation and spent fuel disposal, EGS accumulates the costs of RBNS nuclear fuel as a total direct capitalized cost of nuclear fuel. EGS further capitalizes financing costs of the nuclear fuel at RBNS incurred prior to its insertion into the reactor core.

150. During the operation of the reactor at RBNS, EGS's recoverable nuclear fuel costs during the reconciliation period include: (1) the amortization of the nuclear fuel; (2) the in-core financing costs; and (3) spent fuel expense.

151. A typical fuel cycle for RBNS is approximately 18 months in duration, including a period for a refueling outage. Therefore, a typical fuel cycle at RBNS consists of approximately 16 months of operation and a two-month refueling outage.

152. The nuclear reactor at RBNS requires approximately 650,000 pounds of uranium to support an 18 month fuel cycle, which represents approximately one-third of all of the nuclear fuel in the reactor.

153. Each reload of the nuclear fuel typically remains in the reactor at RBNS for three fuel cycles. Therefore, the reactor refueling is staggered so that approximately one-third of the nuclear fuel is replaced each fuel cycle.

154. The uranium purchased by EGS pursuant to contracts entered into in the mid-1970s was used in the reactor core at RBNS from the time it achieved commercial operation, up to the present.

155. The 1970s uranium purchased by EGS for RBNS has now all been loaded into the reactor core and will be completely used over the next two refueling cycles, refueling cycles 6 (RF-6) and 7 (RF-7).

156. EGS did not solicit bids for the uranium enrichment services for RBNS because at the time, all U.S. suppliers had to contract with the United States Government for these services. Nevertheless, EGS achieved the prevailing market prices for its later uranium purchases and conversion services through operation of the competitive bidding process.

157. EGS's uranium, conversion, enrichment, and fabrication contracts were reasonable and consistent with the purchasing practices of other utilities for other U.S. nuclear facilities at the time, both in terms of price and contract specifics.

158. In 1990, at a time when uranium prices were relatively low, EGS purchased significant quantities of uranium in the spot market to complete the uranium requirements for RBNS refueling outage number 4 (RF-4) in April 1992.

159. By the end of 1990, EGS signed two additional separate uranium contracts to meet the uranium requirements for RBNS into the late 1990s. The suppliers were Uranerz Exploration and Mining (Uranerz) and RTZ Mineral Services (RTZ). EGS awarded these contracts to Uranerz and RTZ after the solicitation and receipt of favorable bids from these suppliers.

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160. The relatively high cost of the nuclear fuel at RBNS incurred by EGS during the reconciliation period was due to the fact that the uranium was purchased under long-term contracts entered into in the mid-1970s when uranium prices were high.

161. Although EGS placed less expensive uranium into the core-in-service at RBNS during refueling outage number 5 (RF-5), the core-in-service during the reconciliation period still contained significant amounts of the expensive 1970s uranium from refueling outage number 3 (RF-3) and refueling outage number 4 (RF-4).

162. On a total percentage basis, from April 1994 through January 1996, the core-in-service at RBNS still contained approximately 52.5 percent of expensive 1970s uranium.

163. EGS's nuclear fuel costs for RBNS during the reconciliation period were nevertheless reasonable, because prior to and during the reconciliation period EGS and Entergy management made reasonable choices from among the range of alternatives available and in light of the information on nuclear fuel supplies and prices at the time.

164. EGS's uranium, conversion, enrichment, and fabrication contracts were well managed by EGS and Entergy and were consistent in terms and cost with the contracts and contemporaneous industry procurement practices at the time. Therefore, EGS's nuclear procurement prices and overall nuclear fuel costs were reasonable during the reconciliation period.

165. EGS's U.S. Department of Energy (DOE) nuclear Decontamination & Decommissioning (D&D) costs for RBNS during the reconciliation period were governed by Title XI of the National Energy Policy Act of 1992, which established a D&D fund with the U.S. Treasury and provided for annual deposits of \$150,000,000 via a special assessment from domestic utilities.

166. Although neither EGS nor Entergy has sought or received a refund of D&D fees during the reconciliation period from the DOE, EGS made its last payment of the assessment "under

protest with full reservation of all rights to challenge the validity of the assessment and to seek a refund of the entire amount of the payment, with interest as allowed by law ” This issue should be addressed in EGS’s next fuel reconciliation case

167. Refueling Outage five (RF-5) at RBNS began on April 15, 1994, and ended on July 6, 1994. EGS originally planned RF-5 to last 53 days, but the outage actually lasted 82 days

168. EGS established major activities for RF-5 as follows (1) replacement of approximately one-third of the used nuclear fuel assemblies, (2) motor-operated valve testing, (3) main turbine rotor replacement; (4) Residual Heat Removal (RHR) system repairs, (5) diesel generator maintenance; and (6) other modifications to existing plant systems to improve the material condition of the plant.

169. In general, the purpose of a nuclear refueling outage is to refuel the reactor by replacing approximately one-third of the nuclear fuel in the reactor core, make repairs or modifications to the plant that cannot reasonably be made while the plant is operating, and to correct problems that are identified for the first time during the outage

170. The length of a nuclear refueling outage is determined from a management perspective by evaluating the tasks on the “critical path.” of the outage

171. The critical path for an outage is the series of the most lengthy tasks during an outage that cannot be performed simultaneously. The parallel work that would have become critical path to the refueling outage if the actual critical path activity had not occurred is known as near-critical-path activity.

172. Without reference to the specific tasks and the critical path activities of a refueling outage based on an analysis that centers on critical path activities, it is nearly impossible to make a decision whether or not a particular extension of an outage was the result of imprudent management.

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173. The duration of RF-5 at RBNS during the reconciliation period was reasonable to the extent of 69.06 days and was prudently planned and managed to that extent

174. The duration of RF-5 was not reasonable to the extent of 12.94 days, due to EGS's failure to adequately plan and manage the reactor containment airlock work that was performed during the outage.

175. The cost of the replacement power attributable to the unreasonable 12.94 day extension of RF-5 is \$1,830,569, based on the average cost of nuclear fuel at RBNS during the reconciliation period of \$8.60/MWh. Therefore, \$1,830,569 of EGS's fuel expenses attributable to the cost of the replacement power for the unreasonable extension of the duration of RF-5 by 12.94 days should be disallowed.

176. Forced Outage No. 94-01 (FO-94-01), or Outage No. 94-03 at RBNS, occurred on September 8, 1994, when RBNS experienced a process water "noise spike" that was perceived by the reactor vessel water level transmitters as an improper or high reactor vessel water level. The vessel water level transmitters sent a "scram signal" to the reactor protection system logic, which shut down the plant.

177. EGS replaced a leaking fuel rod assembly during forced outage FO-94-01, (outage no. 94-03), and also repaired eight segments of Control Rod Drive (CRD) piping, one of which was found to be leaking. The outage lasted 42.7 days.

178. The reactor vessel water level transmitter automatic shutdown feature at RBNS ensures that water will not enter the steam lines and eventually travel to the main turbine where the turbine blading could be damaged.

179. The actual source of the initiating event or noise spike causing forced outage FO-94-01 at RBNS was never identified, but all four of the reactor vessel water level transmitters responded to the event.

180. During RF-5, EGS installed Rosemount Model 1153 Transmitters to replace two of the four reactor vessel water level transmitters due to the degradation of the originally-installed Rosemount Model 1152 Transmitters. There was a need for the installation of a special “damping” card in the new Model 1153 transmitters to allow them to function like the original Model 1152 transmitters.

181. “Damping” on a reactor vessel water level transmitter serves to filter out spurious or background signals that do not represent actual vessel water conditions

182. EGS personnel installed one of the new Model 1153 transmitters without any damping card and the other transmitter contained a damping card with incorrect settings

183. Deleted.

183A. The evidence presented by the Cities demonstrates that the validity of EGS’s after-the-fact calculation of the effect of the process noise on the improperly installed Rosemount Model 1153 transmitters is, at best, questionable; thus, EGS has not established that the transmitters were not the cause of FO-94-01.

183B. In its response to the NRC regarding FO-94-01, EGS concluded that the reasons for the violations were due to an “oversight on the part of engineering” and because “the maintenance planner did not properly plan the maintenance work order ”

183C. EGS admitted in contemporaneous correspondence with the NRC that the reason for the spurious reactor trip on September 8, 1994 was because the improperly installed transmitters were overly sensitive to process noise.

183D. The problem with the Rosemount 1153 transmitters with little or no damping being susceptible to false indications due to process noise was identified as early as April 1988 when SIL 463 was issued.

183E. Given that EGS personnel installed the transmitters improperly, that there were known problems with the improperly installed transmitters, and that EGS did not establish that the improperly installed transmitters were not the cause of FO-94-01, it follows that the improperly installed transmitters were the cause of FO 94 01

183F. The improper installation of the Rosemount 1153 transmitters was due to imprudent management on the part of EGS. Therefore, the associated replacement power costs were not reasonable and necessary expenses, and a disallowance of \$1,519,787 on a systemwide basis is appropriate.

184. Deleted.

185. Deleted.

186. Forced outage number FO-94-02, or outage number 94-04 at RBNS occurred on October 8, 1994, due to a failure of a recirculation pump seal which required a reactor shutdown for repairs. This forced outage lasted 5.8 days, ending on November 3, 1994

187. The failed recirculation pump seals at RBNS had been replaced prior to the forced outage with a new-type seal during an earlier refueling outage, RF-5. Before RF-5 at RBNS, the recirculation pump seals were replaced several times and the new design was an attempt by EGS to correct the performance problems encountered with the old design.

188. The new recirculation pump seal design failed due to accelerated wear caused by particles in the reactor cooling water at RBNS

188A. EGS did not properly inform MPR with purge water quality data or of the possibility of a crud burst occurring. Had the consultant been properly informed, MPR's report indicates that it would have recommended silicon carbide rather than the tungsten-carbide that eventually failed and caused forced outage FO-94-02.

188B. The risk assessment performed by EGS management for use of tungsten-carbide versus silicon carbide seals was not adequate because no criteria for particulate levels was defined by the vendor or asked for by design engineering.

188C. A reasonable utility manager would have employed all relevant information available at the time in its assessment of the risk of using of tungsten-carbide versus silicon-carbide seals. EGS failure to perform an adequate risk analysis constitutes imprudence.

188D. Because forced outage FO-94-02 was the result of imprudent management on the part of EGS, the associated replacement power costs were not reasonable and necessary expenses. Therefore, a disallowance of \$545,548 on a systemwide basis is appropriate.

189. Deleted.

190. Deleted.

191. A "crud burst" is a phenomenon that occurs in water systems due to particulate accumulation on the inside surfaces of water pipes during normal operation.

192. Deleted.

193. Outage number 94-05, (forced outage number FO-94-03), occurred at RBNS on December 4, 1994, when a technician at the plant made a communication error which caused a



reactor trip or shutdown during the monthly testing of the Main Steam Isolation Valves (MSIVs). The outage lasted approximately 7 4 days, ending on December 12, 1994

194. During the monthly testing of the MSIVs at RBNS, EGS technicians initiated a half isolation of the controls for the MSIVs. The MSIV test is designed such that only a single, one-half isolation is encountered at one time. Two concurrent one-half isolations will cause the closure of the MSIVs and a plant shutdown or reactor "scram "

195. During the MSIV testing at RBNS, one of the technicians performing the test misunderstood a communication in the control room to be an acknowledgment that a first one-half isolation signal had been reset, when in fact the communication concerned the reset of an alarm annunciator.

196. Upon hearing the control room alarm reset communication, the technician signed-off the reset procedure step and the test proceeded to the next section, which involved inserting the second half isolation in the plant logic at RBNS

197. Because the first one-half isolation had never in fact been reset, the insertion of the second half isolation completed the logic for the closure of the MSIVs, causing a plant shutdown and forced outage number FO-94-03.

198. Deleted.

199. Deleted.

199A. A contributing cause to the human error causing forced outage FO-94-03 was the improper modification of verification step procedures by EGS management. By removing the verification procedures, EGS management set up an independent verification method that established a work practice that was, as stated by EGS, "less than adequate "

199B. The decision by EGS management to remove the verification procedure was not reasonable in light of the circumstances, information and options available at the time, and was therefore imprudent.

199C. The actions and decisions of EGS's technicians that led to forced outage FO-94-03 were controllable and/or affected by EGS management

199D. The ultimate performance of a utility's technicians is a function of the adequacy and reasonableness of the utility's management. With respect to FO-94-03, EGS's management was neither adequate nor reasonable because EGS management did not have in place the basic procedures or the necessary safeguards to prevent such a catastrophic event from occurring as the result of such a simple mistake.

199E. Because forced outage FO-94-03 was the result of imprudent management on the part of EGS, the associated replacement power costs were not reasonable and necessary expenses. Therefore, a disallowance of \$657,386 on a systemwide basis is appropriate.

200. As a result of the operation of the ESA, EGS paid \$36,936,199.02 to its affiliate Entergy operating companies (EOCs) for energy it received from the Entergy system energy exchange pool during the reconciliation period.

201. EGS's affiliate EOC purchased power expense represents 1,838,569 MWh of electricity it purchased from affiliate EOCs during the reconciliation period at an average cost of \$20.09/MWh.

202. Schedule MSS-3 of the ESA determined the pricing and exchange of energy among EGS and the affiliate EOCs during the reconciliation period.

203. By approving Schedule MSS-3 and the ESA, the Federal Energy Regulatory Commission (FERC) has determined how the EOCs will be reimbursed for energy sold to the exchange pool and how the EOCs, including EGS, will purchase energy from the exchange pool

204. When an EOC such as EGS supplies energy to the exchange pool that the EOC produced, it receives an Operations & Maintenance (O&M) adder, the purpose of which is to reimburse the producing EOC for the incremental cost associated with making the sale to the exchange pool

205. The EOC exchange pool affiliate transaction O&M adder is not reflected in EGS's fuel costs for the reconciliation period and is therefore not passed on to ratepayers in their fuel costs

206. EGS purchased power from its affiliate EOCs participating in the system exchange pool during the reconciliation period at an average price of \$20.09/MWh and that price was no higher than the prices charged by the supplying EOC affiliates to the other EOCs or affiliates

207. The FERC has determined that the ESA and Schedule MSS-3 is a just and reasonable way of allocating energy costs and revenues among the EOCs, including EGS, and has determined that the charges imposed on EGS by operation of the ESA are fair and reasonable in comparison to the charges imposed on the other EOCs

208. Additionally, because the O&M adder for energy sales to the EOC energy exchange pool is not reflected in the EGS's fuel costs and does not include a profit, EGS's purchased power expenses of \$36,936,199.02 for energy purchased from the system exchange pool during the reconciliation period were reasonable.

209. Although each EOC's allocation of energy costs and revenues under the ESA may vary based on its relative size and its operating characteristics, the ESA ensures that EGS is paying proportionately no more for purchased power through the ESA than any of its affiliates who are also parties to the agreement.

210. Schedule MSS-5 of the ESA provides that EGS is to be reimbursed for its cost of fuel to supply the pre-merger system power sales plus an O&M adder, but that EGS not share in the net revenue balance or profits from such sales. In its opinion and order approving the merger of Entergy and EGS, the FERC found good cause for limiting EGS's participation in the profits from off-system sales contracts in existence at the time of the merger

211. The FERC approved the allocation of off-system sales O&M adders among EGS and the EOCs as set forth in Schedule MSS-5 of the ESA as reasonable. Although EGS did receive its share of net balance revenues from such sales made after the merger during the reconciliation period, EGS properly accounted for the differential in revenues received by EGS, as compared to the other EOCs.

212. The \$1,189,982.80 System Fuels, Inc., fuel-oil purchase by EGS was reasonable because the \$121.80 price per barrel was below the market price for fuel oil when compared to both the average and low spot market prices, according to *Platt's Oilgram*. The price for the fuel oil was no higher than the prices charged by System Fuels, Inc., to its other affiliates.

213. During the reconciliation period, EGS purchased all of Agrilectric Company's (Agrilectric) net energy output at a price of \$35.42/MWh pursuant to a contract rate approved by the Louisiana Public Service Commission (LPSC). EGS purchased a total of \$3,756,557.78 worth of purchased power from Agrilectric during the reconciliation period.

214. EGS's purchased power costs for its Agrilectric transactions during the reconciliation period were above EGS's avoided cost. Had Agrilectric been located in Texas rather than Louisiana, EGS would likely have paid for the purchased power in accordance with EGS's Texas tariff for Small Power Producers. The total purchase price for the Agrilectric power under that tariff would have been approximately \$1,750,800.10, or approximately \$2,005,756 less than EGS paid during the reconciliation period.

214A. EGS did not present sufficient evidence to show that it needed the capacity as required by P.U.C. SUBST. R. 23.66(d)(1)(D) when it renegotiated the Agrilectric contract in 1994

215. Because EGS was not obligated to purchase the Agrilectric power, the appropriate price ceiling is EGS's avoided cost, reflected by what EGS would have paid for the power had the Agrilectric power been purchased under EGS's Small Power Producer tariff. Accordingly, EGS's expenditure of \$2,005,756 above its avoided cost of \$1,750,800<sup>10</sup> for the Agrilectric purchased power was unreasonable and excessive and should be disallowed.

216. In the Preliminary Order in this docket, the Commission directed that the profit margins or "adders" from EGS's off-system power sales were, in their entirety, subject to a reasonableness review and reconciliation beginning April 28, 1994, through the end of the reconciliation period.

217. Pursuant to that Order, EGS is required to allocate 100 percent of its off-system sales adders as reconcilable beginning on April 28, 1994, the date of the final order in Docket No. 12712.

218. The Commission's Final Order in Docket No. 12712 did not explicitly continue the 75-25 percent split or sharing of the margins from EGS's off-system sales originally approved in Docket No. 10984. Therefore, no vested interest in a share of the off-system sales revenues or adders was conferred on EGS.

219. Although the interim fixed fuel factors in effect during the last portion of the reconciliation period were implemented by agreement of the parties on an interim basis in Docket No. 12712 beginning as early as March 1994, the Commission did not consider and finally approve those fuel factors until April 28, 1994, the date the Final Order in that docket was signed.

220. The Commission Preliminary Order directed that EGS's off-system sales adder revenues should be allocated 100 percent to ratepayers as reconcilable beginning on April 28, 1994

220A. An adjustment of \$741,442, as calculated by EGS, represents the amount of off-system sales margins and/or adders that should be allocated to Texas retail fixed fuel factor ratepayers for the period covering April 28, 1994 through the end of the reconciliation period

221. EGS's total transmission or wheeling revenues which it received under transmission service contracts approved by the FERC between EGS and wholesale transmission customers ("Company Service") amounted to \$42,007,597, on an Entergy systemwide basis, for the reconciliation period.

222. EGS's company service transmission or wheeling revenues are revenues which EGS received pursuant to contracts EGS entered into before the merger with Entergy Corporation. Consequently, these revenues are not part of the Intra-System Bill (ISB) and are therefore not allocated to any of the other EOCs.

223. EGS's total transmission or wheeling revenues associated with FERC-regulated Entergy System transmission transactions under Entergy's open access transmission tariff ("Access Service") amounted to \$1,501,687 during the reconciliation period. Access service transmission or wheeling revenues are revenues EGS received through the Entergy system pool and were allocated to each of the EOCs including EGS, on a monthly basis by operation of the ISB under the FERC-approved ESA.

224. EGS had total transmission equalization expenses, which were charged to FERC Account 565 and which EGS incurs under Schedule MSS-2 of the ESA, amounting to \$16,565,619 during the reconciliation period.

225. EGS's total net transmission or wheeling revenues for the reconciliation period, after deducting transmission equalization charges, amounted to approximately \$26,943,665 on a total company basis, or approximately \$11,000,000 on a Texas retail jurisdictional basis

226. Because EGS's transmission or wheeling revenues and costs were not allocated to Texas retail ratepayers during the reconciliation period, but were allocated to a separate rate class specified by the Commission's Order in Docket No 12852, EGS's last base rate case, Texas retail ratepayers should not benefit from an inclusion of EGS's net wheeling revenues in this fuel reconciliation proceeding.

227. EGS's SO<sub>2</sub> emissions allowance revenues during the reconciliation period resulted from the EPA auction of withheld allowances first available for use in the years 2000-2001. EGS received approximately \$50,000 from the auction of its SO<sub>2</sub> emissions allowances during the reconciliation period.

228. EGS accounted for the SO<sub>2</sub> emissions allowance revenues which it received during the reconciliation period in FERC Account 411.8, entitled "Gains from Disposition of Allowances," which is included as utility operating income in the Statement of Income for the Year in FERC Form 1 for 1994.

229. P.U.C. SUBST. R. 23.23 defines eligible fuel costs according to the FERC Uniform System of Accounts, as of September 30, 1992

230. On March 31, 1993, the FERC issued Order No 552, effective January 1, 1993, regarding "Revisions to Uniform System of Accounts to Account for Allowances under the Clean Air Act Amendments of 1990," expressly leaving the proper accounting treatment of revenues from SO<sub>2</sub> emissions allowances to be determined by the state regulatory commissions

231. Because the Commission has not expressly determined whether or not SO<sub>2</sub> emission allowance revenues are reconcilable fuel revenues, EGS should record SO<sub>2</sub> emission allowance

revenues in FERC Account 254, rather than Account 411.8, so that both emissions revenues and costs may be considered by the Commission at a future date.

232. Because EGS's SO<sub>2</sub> emission allowance revenues amounted to only \$50,000 during the reconciliation period, the regulatory treatment of such revenues should not be decided on the merits due to the relatively small amount of such revenues in this reconciliation.

233. EGS's system electricity losses during the reconciliation period amounted to 2,543,009 MWh of electricity, out a total of 51,512,084 MWh of electricity produced. During the reconciliation period, EGS identified and recovered approximately \$1,000,000 in lost revenues due to equipment failure, process failure, and theft of electricity.

234. EGS has in place adequate measures to address lost revenues attributable to theft of electricity and current diversion in its diverse, mainly rural service territories and its employees have been trained to investigate current diversion, take corrective action appropriate to the circumstances, and reasonably recover lost revenues during the reconciliation period.

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236. Deleted.

237. Deleted.

238. Deleted.

239. EGS adjusted its Generation Expenses & Purchased Power Expenses, resulting in net amounts for these downward adjustments of \$17 and \$12,022, respectively. The foregoing adjustments are reasonable as timing adjustments to reflect actual costs and adjustments in the applicable months.



240. EGS made the refunds ordered in Docket No. 13170, its last fuel reconciliation for the period October 1, 1991, through December 31, 1993, after December 31, 1994. EGS should have made these refunds to customers before December 31, 1994, because on January 1, 1995, interest on the refunded amounts began to accrue.

241. In making the refunds ordered in Docket No. 13170, EGS made an entry of \$50,091 to reflect the interest associated with those refunds which was not correct because the actual refunds occurred over several months. Therefore, the \$50,091 in interest recorded for the refunds should be deducted or removed.

242. As of October 31, 1994, EGS's ending balance of the refunds ordered in Docket No. 10894 was under recovered by (\$779,971). EGS did not carry forward this refund balance from Docket No. 10894 and include the balance in the instant fuel proceeding, the next fuel reconciliation after Docket No. 13170, as required in Docket No. 10894.

243. EGS did not carry forward or transfer its \$779,971 over-refund amount from the Docket No. 10894 refunds until April 1996. The \$779,971 amount of the over-refund in Docket No. 10894 should be carried forward into EGS's over/under-recovered fuel balance at the beginning of November 1994.

244. Based on EGS's Texas retail eligible projected fuel costs of \$232,636,597 as set in Docket No. 12852, EGS's under collection of approximately \$22,894,943 in fuel costs is equivalent to 9.5 percent, which exceeds the threshold limit of 4.0 percent set forth in P.U.C. SUBST. R. 23.23(b)(2)(A)(iii)(II).

245. Deleted.

246. Deleted.

247. Deleted.

248. Except as indicated otherwise above, during the reconciliation period EGS generated electricity efficiently and maintained effective cost controls, and for all nonaffiliated fuel and fuel-related contracts, its contract negotiations produced the lowest reasonable cost of fuel to ratepayers.

### **B. Conclusions of Law**

1. Entergy-Gulf States (EGS) is a public utility as defined in the Public Utility Regulatory Act of 1995, Tex. Rev. Civ. Stat. Ann. art. 1446c-o (Vernon Supp. 1997) [PURA 95] §2.0011(1).

2. The Public Utility Commission of Texas (Commission) has jurisdiction over this proceeding under PURA95 §§1.101(a), 2.001, 2.208, and 2.212(g). The jurisdiction of the Commission extends to all Texas retail customers of EGS, including those customers that pay the fixed fuel factor and those that are classified as non-fixed fuel factor customers.

3. The State Office Of Administrative Hearings (SOAH) has jurisdiction over all matters relating to the conduct of a hearing, including the preparation of a proposal for decision with findings of fact and conclusions of law in this proceeding pursuant to PURA 95 §1.101(e) and TEX. GOV'T. CODE ANN. Ch. 2003.047.

4. EGS provided published and direct notice of its application in this proceeding as required by P.U.C. SUBST. R. 23.23(b)(4).

5. P.U.C. SUBST. R. 23.23(b) (eff. May 1, 1993) applies to this proceeding because EGS's fixed fuel factors in effect during the first two months of the reconciliation period (January and February 1994) were set in Docket No. 10894, decided on August 19, 1993, after the May 1, 1993 effective date. EGS's fixed fuel factors in effect for the remainder of the reconciliation period were set in Docket No. 12712, decided on April 28, 1994.

6. A utility's expense is not an allowable reconcilable fuel cost to the extent it resulted from the utility's imprudence, or was not reasonable and necessary to provide reliable electric service, as set forth in P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I).

7. The scope of a fuel reconciliation proceeding includes any issue related to determining the reasonableness of the utility's fuel expenses during the reconciliation period and whether the utility has over- or under-recovered its reasonable fuel expenses. P.U.C. SUBST. R. 23.23(b)(3)(B)(i).

8. Prudence is the exercise of that judgment and the choosing of one of that select range of options which a reasonable utility manager would exercise or choose in the same or similar circumstances given the information or alternatives available at the point in time such judgment is exercised or option is chosen. There may be more than one prudent option within the range available to a utility in any given context. Any choice within the select range of reasonable options is prudent, and the Commission should not substitute its judgment for that of the utility. The reasonableness of an action or decision must be judged in light of the circumstances, information, and available options existing at the time, without benefit of hindsight. *Inquiry of the Public Utility Commission of Texas into the Prudence and Efficiency of the Planning and Management of the Construction of the South Texas Nuclear Project*, Docket No. 6668, 16 P.U.C. BULL. 183, 483 (June 20, 1990); and *Petition of Southwestern Public Service Company for a Fuel Reconciliation*, Docket No. 14174, \_\_ P.U.C. BULL. \_\_ (Jan. 5, 1996) (not yet published).

9. An isolated error or failure to identify or correct an isolated problem can constitute imprudence; however, whether it does or not depends upon whether the utility's conduct accords with the prudence standard as stated above. *Application of Gulf States Utilities Company to Reconcile Fuel Costs, Establish New Fixed Fuel Factors, and Recover its Under-Recovered Fuel Expense*, Docket No. 10894, 19 P.U.C. BULL. 1401, 1419 (April 28, 1994).

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9A. Utility management is responsible for the work-related actions and decisions of its employees. Utility management is responsible for establishing, monitoring and enforcing appropriate operations and procedures and for ensuring that its employees perform up to those standards. Inadequate, substandard, or otherwise inappropriate work methods or products reflect the cumulative actions and decisions of utility management.

10. If its eligible fuel expenses for the reconciliation period included an item or class of items supplied by an affiliate of the utility, the utility has the burden of showing that the prices charged by the supplying affiliate to the utility were reasonable and necessary and no higher than the prices charged by the supplying affiliate to its other affiliates or divisions or to unaffiliated persons or corporations for the same item or class of items. P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(II).

11. The doctrine of *res judicata*, or claim preclusion, bars litigation of all issues connected with a cause of action or defense, which, with the use of diligence, might have been tried in the prior suit. The doctrine of collateral estoppel, or issue preclusion, bars the re-litigation of any ultimate issue of fact actually litigated and essential to the judgment in a prior suit, regardless of whether the second suit is based upon the same cause of action. *Bonniwell v. Beech Aircraft Corp.*, 663 S.W.2d 816, 818 (Tex. 1984). The doctrine of collateral estoppel requires that the facts sought to be litigated in the second action were fully and fairly litigated in the prior action. *Bonniwell*, 663 S.W.2d at 818.

12. Because the stipulation and final order in Docket No. 13170 specifically reserved, in a non-contested proceeding, the review of the reasonableness of certain fuel issues, *res judicata* does not preclude the consideration of those issues in this docket.

13. EGS, the other Entergy Operating Companies, and System Fuels, Inc., are affiliates under PURA 95 §1.003(2).

14. EGS successfully carried its burden of proof to show that its purchased power and fuel oil transactions with its affiliates during the reconciliation period occurred at reasonable and necessary prices charged by the affiliates and were at prices that were no higher than the prices charged by the supplying affiliates to its other affiliates or divisions or to unaffiliated persons or corporations for the same item or class of items in accordance with P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(II) and PURA 95 §2.208(b).

15. EGS's Agrilectric purchased power transaction expenses above EGS's avoided cost during the reconciliation period were not reasonable and necessary, and therefore not in accordance with P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I).

16. EGS's long- and short-term natural gas contracts and expenses were reasonable and necessary to provide reliable electric service to its customers during the reconciliation period, with the exception of: (a) \$62,958 in spot-gas purchases at Willow Glen in March 1994, which EGS failed to show was reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I), and (b) \$3,473,207 in short-term natural gas expenditures for which EGS failed to meet its burden of proof in demonstrating that such expenses were reasonable and necessary.

17. EGS failed to show that 12.94 days of Refueling Outage 5 (RF-5) at River Bend Nuclear Station (RBNS) were prudently planned and managed; therefore, EGS's replacement purchased power costs for that portion of RF-5 were not reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I). Under traditional cost-of-service rate regulation applicable to EGS, EGS ratepayers should bear the risk of costs associated with an extended forced outage that is not caused in whole or in part by imprudent management. However, implementation in the future of a variation of cost-of-service-based regulation, such as performance-based regulation, may necessitate deviating from the traditional application of the prudence standard.

17A. EGS failed to show that \$1,519,787 of replacement power costs associated with forced outage FO-94-01 were reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I).

17B. EGS failed to show that \$545,548 of replacement power costs associated with forced outage FO-94-02 were reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I).

17C. EGS failed to show that \$657,386 of replacement power costs associated with forced outage FO-94-03 were reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I).

18. EGS did not properly and accurately account for \$90,653 in coal costs for the month of September 1994 at Big Cajun II, Unit 3, during the reconciliation period and that expense is not reasonable as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i) and (ii).

19. EGS failed to accurately justify \$226,447 in replacement power costs for Big Cajun II, Unit 3, with interest on a Texas retail basis, as reasonable and necessary fuel expenses incurred during the reconciliation period as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i) and (ii).

20. The Commission has the discretion under P.U.C. SUBST. R. 23.23(b)(1) and (b)(3)(B)(ii) to proportionately and consistently allocate fuel costs among fixed- and non-fixed-fuel-factor customers. Because, EGS did not establish that its fuel cost allocation methodology proportionately and consistently allocates fuel costs to fixed- and non-fixed fuel-factor customers based on EGS's actual incurrence of fuel costs to serve them, the Commission is well within its discretion to adopt a just and reasonable fuel cost allocation methodology based on actual fuel cost incurrence, and is not required to allocate fuel costs according to whether the customer pays rates based on EGS's system average or system incremental fuel costs.

21. Deleted.

22. Deleted.

23. Deleted.

24. Except as provided otherwise in the Findings of Fact, EGS met its burden of proof under PURA 95 §§2.212(g), 2.208(b), and P.U.C. SUBST. R. 23 23(b)(3)(B)(i)-(ii) regarding costs it requested be treated as allowable reconcilable fuel expense for the reconciliation period.

SIGNED AT AUSTIN, TEXAS the 1<sup>st</sup> day of April, 1997.

PUBLIC UTILITY COMMISSION OF TEXAS

  
PAT WOOD, III, CHAIRMAN

  
ROBERT W. GEE, COMMISSIONER

  
JUDY WALSH, COMMISSIONER

ATTEST:

  
PAULA MUELLER  
SECRETARY OF THE COMMISSION

**PUC DOCKET NO. 15102**  
**SOAH DOCKET NO. 473-96-0117**

**APPLICATION OF GULF STATES §  
UTILITIES COMPANY TO §  
RECONCILE ITS FUEL COSTS, FOR §  
PERMISSION TO DELAY §  
REQUESTING A SURCHARGE, OR IN §  
THE ALTERNATIVE, FOR A §  
SURCHARGE TO RECOVER UNDER- §  
RECOVERED FUEL EXPENSE §**

**PUBLIC UTILITY COMMISSION  
OF TEXAS**

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PUBLIC UTILITY COMMISSION

**ORDER ON REHEARING**

On December 7, 1995, Entergy-Gulf States, Inc. (EGS or GSU)<sup>1</sup> filed an application requesting (1) approval of total fuel and purchased power costs of approximately \$318 million for the period from January 1, 1994, through June 30, 1995, (the reconciliation period), and (2) authorization to request, in a future proceeding, a surcharge for the purpose of collecting an estimated under-recovered fuel expense of \$22,375,752, plus interest and less any Commission-authorized disallowances and/or adjustments. In the alternative, EGS proposed to impose a surcharge over a 12-month period in this proceeding for the purpose of collecting its under-recovered fuel expenses, as determined by the Commission. In a letter filed January 23, 1997, EGS states that "in order to minimize the rate impact on its customers, the Company is willing to surcharge over a three or four month period, at the Commission's discretion."

The Proposal for Decision (PFD) issued by the administrative law judge (ALJ), containing findings of fact and conclusions of law, is adopted and incorporated into this Order, except to the extent specified by this Order or inconsistent with this Order.

In this Order, the Commission clarifies several general issues addressed in the PFD, and discusses the reasoning that underlies the Commission's determinations in the instances that its

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<sup>1</sup> For clarity, all references to GSU in the proposed findings of fact and conclusions of law in the PFD have been changed to EGS in this Order.



findings and conclusions in this docket differ from those proposed in the PFD. Such differences include issues related to (1) the allocation of fuel cost disallowances to Texas retail non-fixed fuel factor customers; (2) EGS's short-term gas contracts; (3) several outages at River Bend, EGS's nuclear facility; and (4) the surcharge methodology. Findings of fact and conclusions of law have been added, changed or deleted where appropriate to reflect the determinations of the Commission, followed by the Ordering Paragraphs of the Commission.

## **I. General Issues**

### **A. Application of the Prudence Standard**

The Commission initially observes that the PFD applied the traditional prudence standard in deciding whether EGS met the fuel reconciliation requirements of P.U.C. SUBST. R. 23.23(b)(3)(B):

The exercise of that judgment and the choosing of one of that select range of options which a reasonable utility manager would exercise or choose in the same or similar circumstances given the information or alternatives available at the point in time such judgment is exercised or option is chosen.

There may be more than one prudent option within the range available to a utility in any given context. Any choice within the select range of reasonable options is prudent, and the Commission should not substitute its judgment for that of the utility . . . . The reasonableness of an action or decision must be judged in light of the circumstances, information, and available options existing at the time, without benefit of hindsight.<sup>2</sup>

Because the Commission did not indicate by rule, case precedent, or preliminary order that a standard different from this would apply in this proceeding, the PFD properly cited the traditional prudence standard as the measure by which EGS's actions are judged in this docket.

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<sup>2</sup> Inquiry of the Public Utility Commission of Texas into the Prudence and Efficiency of the Planning and Management of the Construction of the South Texas Nuclear Project, Docket No. 6668, 16 P.U.C. BULL. 183, 483 (June 20, 1990); Petition of Southwestern Public Service Company for a Fuel Reconciliation, Docket No. 14174, \_\_ P.U.C. BULL. \_\_ (Jan. 5, 1996) (not published).

The Commission emphasizes, however, that any application of the prudence standard must take into account two related principles: (1) the regulation of utilities is a substitute for the forces of competition and, therefore, (2) utility actions and decisions should be analyzed relative to the actions and decisions that would be made under the same or similar circumstances in a competitive environment. These concepts are nothing new. In explaining the Commission's purpose, the Legislature noted that "[u]tilities are by definition monopolies . . . and the normal forces of competition that operate to regulate prices in a free enterprise society do not always operate, and that therefore, . . . utility rates, operations, and services are regulated by public agencies."<sup>3</sup> Given its role as a proxy for the normal forces of competition, the Commission believes that in assessing the prudence of a utility's actions and decisions, it must attempt, to some degree, to approximate the actions and decisions that would be made under the same or similar circumstances in a competitive environment. Only then can the Commission truly regulate in a manner that assures that the utility's rates, operations and services are just and reasonable to its consumers.

Furthermore, the Commission underscores the continued need for a utility to prudently assess where the relevant markets stand *vis-a-vis* its contracts and to pursue the renegotiation of any fuel and fuel-related contracts that are or may become above-market. In this regard, while a utility's active administration of contracts is clearly within the scope of a prudence review in a fuel reconciliation proceeding, a utility's inaction (or passive administration) is also subject to a prudence review during the fuel reconciliation. Consequently, if the opportunity to renegotiate an above-market contract to more favorable terms exists, but is not pursued by the utility, such failure to renegotiate may constitute imprudence on part of the utility. For these reasons, the Commission concludes that (1) a utility has a continual obligation to reasonably pursue the renegotiation of above-market contracts on behalf of its ratepayers; and (2) in a fuel reconciliation proceeding, a utility has the burden of proving that its contract renegotiation efforts (or lack thereof) were reasonable in light of its particular contractual obligations and other relevant circumstances.

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<sup>3</sup> PURA95 §2.001(a).

**B. Cost-of-Service Regulation and Application of the Prudence Standard**

In the discussion of the Forced Outage 94-01 in Section IX.C.2. of the PFD, the ALJ concludes that “under cost-of-service regulation, currently applicable to EGS, EGS’s ratepayers should not bear the risk of costs not imprudently incurred which are associated with the outage (FO-94-01).”<sup>4</sup> Because the Commission is concerned that this statement may be improperly interpreted to restrict its authority in a cost-of-service regulatory environment, it is necessary to clarify this critical point.

The Commission notes there are forms of cost-of-service-based regulation that would result in a utility’s absorption of costs even when those costs are not incurred as a result of the utility’s imprudent conduct. For example, the implementation of performance-based regulation as a variation of traditional cost-of-service regulation would allocate risks among the utility’s shareholders and its ratepayers differently from the traditional prudence standard, in that those shareholders would share more in the risk of additional or unexpected costs. While the traditional application of the prudence standard is appropriate in this case, circumstances may dictate otherwise in the future, as long as the utility is given proper notice of what standard the Commission will employ. Accordingly, the Commission does not adopt the ALJ’s discussion in the final paragraph on page 87 of the PFD, finding it overbroad and potentially misleading.

**C. The Doctrine of *Res Judicata***

In finding that the doctrine of *res judicata* does not preclude an examination of one of EGS’s long-term natural gas contracts, the PFD concludes that “[b]ecause the reasonableness of the Pontchartrain swing contract was not fully and fairly litigated in Docket No. 13170, the findings of reasonableness in that proceeding do not act to collaterally estop the Commission’s review of the prudence of that contract in a litigated proceeding.”<sup>5</sup> The PFD bases its conclusion that the contract was not “fully and fairly” litigated upon the fact that Docket No. 13170 was a stipulated case. Also, as a secondary ground for finding that the doctrine of *res judicata* does

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<sup>4</sup> PFD at 87.

<sup>5</sup> PFD at 45.

not apply, the PFD notes that the specific terms of the stipulation in Docket No. 13170 reserved the issue of the prudence of the Pontchartrain swing contract for a future date. Although the Commission agrees with the PFD's conclusion that the contract is subject to review in the instant proceeding, it does not concur in every aspect of the PFD's rationale in reaching that conclusion.

The Commission finds that the existence of a stipulation in a docket does not, in itself, make issues of decisional prudence reviewable in subsequent proceedings. For example, if a stipulation includes a specific statement that a contract is prudent and the final order either memorializes or references such a finding, then *res judicata* precludes the relitigation of the prudence of such contract in subsequent proceedings. Thus, the existence of a stipulation may or may not preclude litigation of certain issues in subsequent proceedings, depending upon the language in the stipulation itself and/or the final order issued in the settled proceeding. For these reasons, the Commission does not adopt the discussion of *res judicata* on pages 44 and 45 of the PFD.

The stipulation executed in Docket No. 13170, did not specify that the Pontchartrain contract was prudent. In fact, it specifically stated that none of the agreements reached by the parties had any precedential effect.<sup>6</sup> The conclusion of law in Docket No. 13170 addressing the prudent incurrence of fuel and purchased power expenses, including those expenses incurred under the Pontchartrain swing contract, qualifies its findings with the phrase "[c]onsistent with the terms of the revised stipulation and agreement".<sup>7</sup> Therefore, the decision by EGS to enter into that contract, as well as underlying terms and prices in that contract, are subject to review in this proceeding. For the reasons discussed in Section IX.A.4.b.ii. of the PFD, however, no disallowance relating to the Pontchartrain swing contract is warranted.

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<sup>6</sup> The stipulation in Docket No. 13170 states "[t]his Revised Stipulation and Agreement is entered into solely for settlement purposes; it does not constitute an admission by any signatory as to any material issue and may not be used as precedent by any person or entity or as evidence of agreement by a Party or the Commission to the resolution of any issues." Revised Stipulation and Agreement at 6 (Feb. 15, 1995).

<sup>7</sup> *Application of Gulf States Utilities Company to Reconcile Fuel Costs*, Docket No. 13170, Conclusion of Law No. 6, 20 P.U.C. BULL. 1026 (April 18, 1995).

## **II. Allocation of Fuel Cost Disallowances to Texas Retail Non-Fixed Fuel Factor Customers**

The Commission agrees with the PFD's conclusion that the methodology proposed by the General Counsel for allocating fuel costs to Texas retail fixed-fuel factor customers is appropriate and should be adopted. However, under both EGS's and the General Counsel's respective fuel cost allocation methodologies, Texas retail non-fixed fuel factor customers are excluded from the analysis. Therefore, such customers do not receive their proportionate share of any credit related to a systemwide fuel cost disallowance under either EGS's or the General Counsel's methodology.

There is no question that the Commission has jurisdiction over all rates and charges in the Texas retail jurisdiction. To ensure that all of EGS's Texas retail customers, including non-fixed fuel factor customers, receive their proportionate share of any systemwide fuel cost disallowance, the allocation of the total fuel cost disallowance must be modified to account for the sales to *all* EGS customers in the Texas retail jurisdiction.

Therefore, the Commission finds that it is appropriate to include all Texas retail energy sales—both fixed fuel factor and non-fixed fuel factor—in allocating the systemwide fuel cost disallowance to the Texas retail jurisdiction. Furthermore, in allocating the Texas retail disallowance among Texas retail fixed- and non-fixed fuel factor customers, the Commission finds that it is reasonable to credit certain incremental cost-based non-fixed fuel factor customers (*Rates SUS, SMQ and EAPS*) only for natural gas-related disallowances, with the remaining Texas retail disallowances otherwise allocable to those customers (*i.e.*, nuclear, purchased power, coal and fuel oil) flowing to the Texas retail fixed fuel factor customers.

Specifically, the Commission adopts the method outlined by the Office of Public Utility Counsel (OPC) in its reply to motions for rehearing.<sup>8</sup> Applying OPC's method, Texas retail *Rate SSTS* customers are credited for their share of systemwide disallowance in the same manner in which Texas retail fixed-fuel factor customers are treated under the General Counsel's fuel

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<sup>8</sup> See Office of Public Utility Counsel's Reply to Motions for Rehearing at 2-3 (May 1, 1997).

cost allocation methodology. In contrast, Texas retail *Rate SUS*, *SMQ* and *EAPS* customers are credited only for natural gas-related disallowances, and the otherwise allocable share of the Texas retail disallowance for those customers is credited to the fuel balance of Texas retail fixed-fuel factor customers. This method ensures that all Texas retail customers are charged only for the reasonable and prudently incurred fuel expenses of EGS.

Because EGS's Texas retail non-fixed fuel factor customers are charged on a monthly basis, these customers do not accumulate an over/(under) recovered fuel balance in the same manner as EGS's Texas retail fixed fuel factor customers. Consequently, a surcharge of EGS's under-recovered fuel balance (less any allocated systemwide disallowance) is not required for its Texas retail non-fixed fuel factor customers. Therefore, the only adjustment necessary for EGS's Texas retail non-fixed fuel factor customers is a credit for their proportionate share of any systemwide Commission-approved disallowance or adjustment, with interest, for each month of the reconciliation period.

### **III. Cities Disallowance Relating to EGS's Short-Term Gas Contracts**

P.U.C. SUBST. R. 23.23(b)(3)(A)(iii) states that, in addition to other information specifically listed in the subsection, a utility's petition to reconcile fuel expenses must provide "the quantities purchased and the unit prices and total prices paid under *any contract during the reconciliation period*." (emphasis added) Regarding its short-term natural gas contracts, EGS did not include specific information by contract in its petition consistent with the requirements of P.U.C. SUBST. R. 23.23(b)(3)(A)(iii).

In an attempt to ascertain the reasonableness of EGS's short-term natural gas purchases, the Cities filed Request for Information (RFI) Cities-24-1, which requested EGS to provide "the MMBtu purchased by individual contract on a monthly basis . . . . Please reflect the actual amounts, with prior period adjustments allocated to the appropriate month."<sup>9</sup> EGS responded to this RFI as follows:

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<sup>9</sup> Cities Exh. 94.

The Company's accounting records are not maintained on a contract by contract basis. All purchases during each accounting period are aggregated and booked by supplier. The Gas Supply Department maintains an internal operational database which reports data by invoice . . . This database is not designed to track or to be able to aggregate by individual contract . . . There is no practical way for the Company to aggregate the requested information by contract.<sup>10</sup>

As noted by the General Counsel in its exceptions to the PFD, EGS never supplemented this response.<sup>11</sup> To examine the prudence of EGS's short-term natural gas transactions, the Cities had to resort to a review of a limited set of invoices made available at EGS's offices in Beaumont, Texas. Consequently, many of the transactions through which EGS purchased natural gas during the reconciliation period were not reviewed by the Cities or any other party.<sup>12</sup> The Cities, based upon its review of the limited number of invoices made available, recommend a disallowance of \$3,473,207 in short-term natural gas expenses on a systemwide basis. This recommended disallowance reflects an amount in excess of an applied benchmark of an index price plus \$0.03 per MMBtu.<sup>13</sup>

In its prefiled rebuttal testimony, EGS lists several reasons why the short-term natural gas contracts were not available for review, including but not limited to: evolving, industry-wide contract administration practices that de-emphasize written agreements; the relocation of files during the merger consolidation process; turnover related to the merger consolidation; and the possibility that an employee may have inadvertently misfiled or destroyed some of the agreements and/or amendments.<sup>14</sup> EGS's rebuttal testimony also attempts to demonstrate that the Cities' proposed disallowance for EGS's short-term natural gas purchases, which was necessarily based on its review of a limited number of invoices, is inappropriate. EGS notes, however, that its rebuttal analysis is incomplete in that sufficient details are no longer available

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<sup>10</sup> *Id.*

<sup>11</sup> General Counsel's Exceptions to the Proposal for Decision and Motion for Sanctions at 32 (Jan. 8, 1997).

<sup>12</sup> Cities Exh. 83 at 22 (Griffin direct).

<sup>13</sup> *Id.* at 23.

<sup>14</sup> EGS Exh. 61 at 24 (Harrington rebuttal).

to perform any analysis for the first three months of 1994 at the Willow Glen generating station.<sup>15</sup>

The Commission finds that EGS did not provide sufficient evidence to meet its burden of proof in justifying its level of short-term natural gas expenditures during the reconciliation period. By its own admission, EGS does not maintain data detailing individual short-term natural gas transactions and/or contracts. The Commission finds, however, that such data is necessary to determine whether a utility's short-term natural gas expenses are prudently incurred. Therefore, EGS's failure to comply with the requirement to provide contract-specific information in P.U.C. SUBST. R. 23.23(b)(3)(A)(iii) ultimately undermines its ability to meet its burden of proof with respect to the prudence of its expenditures associated short-term natural gas transactions. The limited evidence presented by EGS in this proceeding is insufficient to meet this evidentiary burden, particularly since EGS's rebuttal testimony addressing the Cities' proposed disallowance is incomplete.

Rather than disallow all of EGS's expenses for short-term natural gas transactions, however, the Commission finds that the preponderance of the evidence favors the adoption of the Cities' proposed disallowance of \$3,473,207 on a systemwide basis. EGS, as well as any other electric utility seeking a review of its short-term fuel expenditures in any future fuel reconciliation proceeding, should observe the need for providing sufficient documentation for each short-term transaction, in compliance with the Commission's rules, if it is to meet its burden of proof with regard to the prudence of such expenditures.

**IV. River Bend Forced Outage 94-01 (FO-94-01);  
Outage No. 94-03: Vessel Transmitter-Spurious Trip**

The Cities propose a disallowance of \$1,519,787 for imprudent management on the part of EGS relating to the FO-94-01 forced outage. The PFD rejects the Cities' proposed disallowance, concluding that the forced outage was not caused, in whole or in part, by imprudent conduct on the part of EGS. The PFD concurs in the position of EGS and the

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<sup>15</sup> *Id.*, Exh. WEH-5.



General Counsel that, regardless of whether EGS had installed maximum damping on the Rosemount Model 1153 transmitters, a noise signal of the amplitude experienced at the River Bend Nuclear Station (River Bend) on September 8, 1994 would have resulted in a reactor shutdown. The PFD further rejects the Cities' disallowance on the grounds that it did not give proper weight to the cause of the outage.<sup>16</sup>

The Commission, however, finds that the preponderance of the evidence supports the disallowance proposed by the Cities relating to this forced outage, based on its conclusion that had EGS exercised prudent management prior to this incident, the outage and associated replacement power costs would have been avoided. As noted by the Cities, there are several documents generated by EGS which support this conclusion of imprudent conduct.

First, EGS unqualifiedly admits to violating NRC procedures with respect to the installation of the transmitters in its response to the NRC addressing the forced outage:

On April 6, 1993, Modification Request 93-0016, an instruction used to install Rosemount Model 1153 transmitters with damping circuitry, did not provide adequate acceptance criteria to specify the amount of adjustment that was allowed for the damping adjustment screw. Consequently, Reactor Level Transmitter 1B21\*LTN080D was overly sensitive to process noise and caused the spurious reactor trip on September 8, 1994.

Entergy Operations concurs with this violation and has determined that the reason for this event was an oversight on the part of engineering in that a minimum acceptance criteria was not specified in MR 93-0016.<sup>17</sup>

On May 20, 1994, Maintenance Work Order R203595, which was intended to install a transmitter with damping circuitry, did not specifically require nor reference the installation of the damping circuitry for Transmitter 1B21\*LTN080C. Consequently, the transmitter was overly sensitive to process noise and caused the spurious reactor trip on September 8, 1994.

Entergy Operations concurs with this violation and has determined that the reason for this event was that the maintenance planner did not properly plan the maintenance work order (MWO).<sup>18</sup>

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<sup>16</sup> PFD at 86-87.

<sup>17</sup> Cities Exh. 61 at 9643.

<sup>18</sup> *Id.* at 9646.

This contemporaneous response to the NRC, which acknowledges a lack of engineering oversight and improper planning, is unquestionably an admission of EGS's failure to prudently address the transmitter issue prior to the forced outage.

Second, EGS was forewarned of the potential problems associated with the failure to include damping in the transmitters or in setting the damping incorrectly. Specifically, Service Information Letter (SIL) 463, issued by General Electric in April 1988, states in pertinent part:

Recently, at BWRs using fast response transmitters with no adjustable electronic filtering capability, noise components in process variable signals have resulted in operational problems such as inadvertent isolations, ECCS initiations and half scrams. The purpose of this SIL is to discuss methods for determining the root cause of the process instrument noise and recommend methods for noise elimination or reduction through filtration of the electrical signal.

\* \* \*

Process variable noise has been observed in all types of GE BWRs from BWR/1s through BWR/6s.<sup>19</sup>

In its own Condition Report on the forced outage, EGS acknowledged the applicability of SIL 463 and its forewarning with respect to the cause of the scram:

Rosemount transmitters with no damping are known to be susceptible to false indications due to process noise disturbances. This was discussed in SIL 463 and in the Rosemount literature. Based on a review of SIL 463 and the Rosemount newsletter, Engineering has determined that, with no damping installed or with damping at minimum position, the transmitters are susceptible to spurious tripping due to process noise. This scenario has been determined to be a significant contributor to the root cause of the scram.<sup>20</sup>

Despite the existence of this documentation, EGS relies upon a mathematical proof, based upon an after-the-fact, hypothetical calculation, to contend that the scram would have occurred in the absence of any imprudence. Based on this calculation, EGS argues that no

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<sup>19</sup> Cities Exh. 100 at 38531. EGS witness Mr. Sellman acknowledged that River Bend is a BWR/6. Tr. at 4619-4621.

<sup>20</sup> Cities Exh. 98 at 10492-10493.

disallowance is warranted. Its use of the term “mathematical proof” in its *post hoc* rationalization, however, is a misnomer when considering the following<sup>21</sup>

- EGS does not know the cause of the noise “spike”,
- EGS did not and could not rule out that the noise “spike” may have been caused by a voltage surge or electrical interference;
- EGS “backed-into” a calculated input signal used in its hypothetical calculation,
- EGS assumed an output to the transmitter;
- EGS does not know the source, size, shape or duration of the noise “spike”, and
- No one, in fact, knows the inputs; so a hypothetical calculation thereof is not relevant.<sup>22</sup>

In conclusion, the following points are clear from the evidentiary record in this case

- EGS personnel, through deficient maintenance work orders issued by management, installed two Rosemount Model 1153 transmitters either with or without improper damping settings when a setting of maximum damping was required. In its response to the NRC, EGS concluded that the reasons for the violations were due to an “oversight on the part of engineering” and because “the maintenance planner did not properly plan the maintenance work order”;
- The susceptibility of the Rosemount transmitters to false indications due to process noise, when there is little to no damping, was identified as early as April 1988 when SIL 463 was issued, and
- EGS admitted in contemporaneous correspondence with the NRC that the spurious reactor trip on September 8, 1994 occurred because the improperly installed transmitters were overly sensitive to process noise

This preponderance of the evidence indicates that EGS installed the Rosemount transmitters with improper damping settings, that the improper installation was due to imprudent management on the part of EGS, and that such imprudent management resulted in the FO-94-01 forced outage. For these reasons, the Commission adopts the Cities’ proposed disallowance of \$1,519,787 on a systemwide basis.

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<sup>21</sup> Cities Exceptions at 58 (Jan. 8, 1997).

<sup>22</sup> Cities Exh. 103 at 413-415; Tr. 4609-4612.

**V. River Bend Forced Outage 94-02 (FO-94-02);  
Outage No. 94-04: Recirculation Pump Seals**

On October 8, 1994, a recirculation pump seal failed at River Bend, resulting in forced outage FO-94-02, which lasted 5.8 days. Earlier in the year, during River Bend refueling outage No. 5,<sup>23</sup> EGS replaced the nuclear facility's failed recirculation pump seals with new tungsten carbide seals, on the advice of a consultant. The Cities recommend a disallowance of \$545,548 associated with the forced outage that subsequently resulted, claiming that EGS's decision to use tungsten carbide seal material, rather than silicon carbide seal material, during the refueling outage was an imprudent one. In finding that this forced outage was prudent and recommending no disallowance, the PFD concludes that the Cities' analysis appears to focus on recurring problems at River Bend, rather than the prudence of actions taken by EGS to correct the pump circulation seal problem.<sup>24</sup>

The Commission finds, however, that the preponderance of the evidence supports the Cities' proposed disallowance relating to this forced outage. EGS's decision to use tungsten carbide sealant was imprudent because it was not reasonable in light of the circumstances, information, and options available to EGS at the time the decision was made. Both the evidence upon which EGS relies in making its case for prudence, as well as the evidence presented by the Cities, supports the Commission's conclusion here.

In arguing that it acted prudently in using new tungsten carbide seals, EGS relies heavily on advice elicited from its consultant, MPR Associates (MPR), whom EGS hired to evaluate the options of silicon carbide versus tungsten carbide for the recirculation pump seals.<sup>25</sup> As noted by the Cities, the flaw in MPR's analysis is that EGS's engineering failed to give MPR the necessary information (*i.e.*, design parameters) regarding particulates in the facility. As a result

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<sup>23</sup> River Bend Refueling Outage No. 5 (RF-5) began on April 15, 1994 and ended on July 6, 1994. PFD at 77.

<sup>24</sup> PFD at 90.

<sup>25</sup> EGS Exh. 13 at 28-29, MBS-7.

of this failure, MPR predicated its conclusions to use the silicon-carbide option on inadequate data, as reflected in MPR's report, which states in pertinent part:

... we conclude that it is reasonable to expect that an N 7500 seal at River Bend with the tungsten-carbide option would experience accelerated wear if it operated without seal injection or otherwise subjected to high concentrations of abrasive particulates.<sup>26</sup>

Conclusions

1. The principal benefit of using the silicon-carbide option is improved abrasion resistance.
2. The improved abrasion resistance provided by the silicon-carbide would be of use in the event of contamination by a high concentration of abrasive particles or a need for extended operation, more than a week or so, without seal injection. These are considered to be low probability events.
3. Given the low probability of the events described in item 2, the benefit of using the silicon-carbide option is judged to be small.
4. The principal risk of using the silicon-carbide option is that silicon-carbide material has a low fracture toughness and limited operating experience in comparison to the alternative, tungsten-carbide material.
5. The additional risk of using silicon-carbide instead of tungsten-carbide is judged to be small.
6. The risk of using silicon-carbide, although judged to be small, is not considered to be warranted by the expected benefits.<sup>27</sup>

Because MPR assigned a low probability event to the occurrence of a high concentration of abrasive particles, it appears that EGS did not adequately inform MPR of the purge water quality or the possibility of a crud burst occurring at River Bend. Had EGS properly provided the consultant with purge water quality data and an assessment of the probability of a crud burst, there is strong evidence to suggest that MPR's report would have recommended using silicon carbide, rather than the tungsten carbide that eventually failed and resulted in the forced outage.

EGS previously admits to its failure to consider these matters in deciding which of the two seal options to choose. In its contemporaneous assessment of the cause of the forced outage,

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<sup>26</sup> EGS Exh. 13, MBS-7 at 3.

<sup>27</sup> *Id.* at 5-6.

EGS acknowledges that “[t]he tungsten carbide seals installed during Refuel Outage (RF)-05 under MR 93-0079 were not the correct design for this application, considering purge water quality and the possibility of a crud burst occurring.” Further, in establishing the contributing cause to the seal failure and resulting forced outage, EGS states that “[t]he risk assessment used for the tungsten-carbide seal design was not complete in that consideration of crud burst and the possible effects of crud burst was not included” and that “criteria for seal purge water purity was not established during the risk assessment.” EGS then goes on to note:

Risk assessment for use of tungsten-carbide versus silicon carbide seals was not adequate because no criteria for particulate levels was defined by the vendor or asked for by design engineering. Additionally, effects from crud burst or system perturbations on seal life were not addressed during the risk assessment. Operating experience on water quality problems with seal purge was not checked.<sup>28</sup>

This contemporaneous documentation in response to the forced outage demonstrates that EGS believed its risk assessment regarding the use of the tungsten-carbide seal was incomplete and inadequate. The Commission finds that the failure to perform an adequate risk analysis of the use of the tungsten-carbide seals was imprudent on the part of EGS, given that a reasonable utility manager would have employed all relevant information available at the time in its assessment of the risk of using of tungsten-carbide versus silicon-carbide seals. By its own admission, EGS did not perform such an analysis. Therefore, the Commission concludes that forced outage FO-94-02 was the result of EGS’s imprudence. The preponderance of the evidence supports the Cities’ recommended disallowance of \$545,548 on a systemwide basis.

**VI. River Bend Forced Outage 94-03 (FO-94-03);  
Outage No. 94-05: Human Error**

Forced outage FO-94-03 at River Bend occurred on December 4, 1994, and lasted approximately 7.4 days. This outage was caused by a technician’s mistake, which in turn caused a reactor trip or scram during the monthly testing of the Main Steam Isolation Valves (MSIVs)

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<sup>28</sup> Cities Exh. 48-B, Tab 23 at 4649-4654 [Condition Report 94-1409].

at River Bend.<sup>29</sup> The Cities claim that this forced outage was the result of imprudent management on the part of EGS and, consequently, a disallowance of \$657,386 is appropriate.<sup>30</sup> The PFD concludes, however, that “human error” causing a reactor shutdown is expected to occur at nuclear power plants like River Bend from time to time, and that EGS’s management could not have prevented this particular outage. Therefore, the PFD finds no imprudence and recommends no disallowance associated with the forced outage.<sup>31</sup>

The Commission disagrees with the PFD’s conclusions. The preponderance of the evidence demonstrates that the forced outage was caused by EGS’s imprudent management, which was a contributing factor in the human error resulting in the scram. Again, by its own admission, EGS acknowledges this imprudence. In its official response to the NRC with regard to this forced outage, EGS states in pertinent part:

Entergy Operations concurs with this violation and believes that the reason for the event was that the technicians who performed the surveillance test procedure (STP) failed to properly self-check their work. A contributing cause of this event was that work practices were less than adequate in that the independent verification method did not identify the mispositioning of the local power range monitor (LPRM) switches. Another contributing cause of the violation was that inadequate corrective actions were taken in response to a previous event

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Entergy Operations concurs with this violation and has determined that the reason for this event was human error on the part of the maintenance technician in that he failed to follow the procedure as written due to a miscommunication. A contributing cause was that verification steps to verify channel status had been removed during a previous revision.<sup>32</sup>

Given these statements by EGS in contemporaneous correspondence with the NRC, the improper modification of verification step procedures was a contributing cause to the human error that occurred prior to the forced outage. In modifying the verification procedures, EGS established

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<sup>29</sup> PFD at 91.

<sup>30</sup> Cities Exh. 48 at 92.

<sup>31</sup> PFD at 93-94.

<sup>32</sup> Cities Exh. 61 at 9636-9638.

an independent verification method that, as EGS states, established a work practice that was “less than adequate.”

Furthermore, subsequent to this forced outage, EGS summarized the corrective steps taken and results achieved in a report to the NRC, which states in pertinent part:

To address the associated human performance issues, individual counseling/discipline was administered as determined necessary by department management. In addition, management expectations were reinforced to site personnel regarding the personal accountability and procedure compliance through management meetings which discussed the specific issues and the overall philosophy of human performance improvement.

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In addition, procedure STP-058-4501 revision 11, was revised to include verification of circuit status lights (located in the back panel) and ammeters for each channel prior to proceeding to the next channel.<sup>33</sup>

Again, this documentation shows that EGS viewed the actions and decisions of its technicians as controlled and/or affected by management actions and decisions, given that management implemented corrective measures to ensure that such a mistake was not repeated.

EGS argues that “[t]he actions and decisions of technicians and contractors should be found imprudent only if there is imprudence of management leading to those actions or decisions.”<sup>34</sup> As a matter of policy, the Commission finds that utility management is responsible for the work-related actions and decisions of its employees. Such management is responsible for establishing, monitoring, and enforcing appropriate operations and procedures and for ensuring that its employees perform up to those standards. Inadequate, substandard, or otherwise inappropriate work methods or products reflect the cumulative actions and decisions of utility management. In other words, an employee’s conduct generally does not occur in a vacuum. Therefore, a utility’s assertion of “human error” will rarely, if ever, shield it from being responsible for events it alleges were the sole result of such an “error”.

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<sup>33</sup> *Id.*

<sup>34</sup> EGS Exh. 13 at 4.



For the reasons stated, the Commission concludes that preponderance of the evidence supports the Cities proposed disallowance of \$657,386 on a systemwide basis

### **VII. Surcharge Methodology**

P.U.C. SUBST. R. 23.23(b)(3)(C)(v) requires that, unless otherwise ordered by the Commission, all refunds and surcharges shall be made through a one-time bill credit or charge. The Commission finds that it is not in the public interest in this case to require a one-time surcharge for Texas retail fixed fuel factor customers, as recommended by the PFD.

Pursuant to the initial order of the Commission dated April 1, 1997, EGS is in the process of implementing a surcharge of its under-recovered eligible fuel balance for its Texas retail fixed fuel factor customers during the billing months of May and June 1997. To the extent that the actual amount surcharged to Texas retail fixed fuel factor customers differs from the amount contained in schedules attached to this Order, the difference shall be added or subtracted, as appropriate, to the reconcilable fuel balance of EGS. In addition, the Commission finds that EGS should refund to its Texas retail non-fixed fuel factor customers the amount calculated in the schedules attached to this Order, with interest, during the first practical billing cycle subsequent to this Order.

### **VIII. Modifications To The PFD's Proposed Findings And Conclusions**

1. The Commission adopts the findings of fact (FF) and conclusions of law (CL) recommended in the PFD, with the exceptions described below. The reasons for these changes are also described below, as required by Section 2003.047 of the Government Code.
2. Proposed Finding of Fact No. 50 is revised to read as follows to clarify the function of the fuel cost allocation methodology proposed by the Commission Staff.

FF50. The fuel cost allocation methodology proposed by Commission Staff allocates to the Texas retail fixed fuel factor customers their proportionate share of fuel costs, based on the fuel costs EGS actually incurs to serve each type of customer.

3. Proposed Finding of Facts Nos. 59A and 59B are added and Conclusion of Law No. 2 is modified to clarify that, as discussed in Section II of this Order, the Commission has jurisdiction over Texas retail sales, regardless of whether the customer is charged via the fixed fuel factor or otherwise. As such, EGS's Texas retail non-fixed fuel factor customers should benefit from any Commission-authorized systemwide fuel cost disallowance.

FF59A. EGS serves Texas retail customers that are not charged the fixed fuel factor, and these customers do not automatically receive the benefit of a fuel cost disallowance that is flowed through to customers via the fixed fuel factor. It is appropriate to include all Texas retail energy sales—both fixed fuel factor and non-fixed fuel factor—in allocating the systemwide fuel cost disallowance to the Texas retail jurisdiction.

FF59B. In allocating the Texas retail disallowance among Texas retail fixed- and non-fixed fuel factor customers, it is reasonable to credit certain incremental cost-based non-fixed fuel factor customers (*Rates SUS, SMQ and EAPS*) only for natural gas-related disallowances, with the remaining Texas retail disallowances otherwise allocable to those customers (*i.e.*, nuclear, purchased power, coal and fuel oil) flowing to the Texas retail fixed-fuel factor customers.

CL2. The Public Utility Commission of Texas (Commission) has jurisdiction over this proceeding under PURA95 §§1.101(a), 2.001, 2.208, and 2.212(g). The jurisdiction of the Commission extends to all Texas retail customers of EGS, including those customers that pay the fixed fuel factor and those that are classified as non-fixed fuel factor customers.

4. As discussed in Section III of this Order, the Commission finds that the ALJ's recommendation regarding the Cities proposed disallowance relating to EGS's short-term gas contracts is not supported by the preponderance of the evidence. Accordingly,

proposed Findings of Fact Nos. 83 and 84 are deleted, Findings of Fact 83A and 84A are added, and Conclusion of Law No. 16 is modified.

FF83A. EGS did not provide sufficient evidence to meet its burden of proof in justifying its level of short-term natural gas expenditures during the reconciliation period. Furthermore, EGS's rebuttal testimony relating to the Cities' proposed disallowance of short-term natural gas expenditures is incomplete.

FF84A. The limited evidence presented by EGS relating to its short-term natural gas contracts is insufficient to allow the Commission to determine whether individual short-term natural gas purchasing decisions were prudent. Therefore, EGS has not met its burden of proof with respect to its short-term natural gas expenditures and the preponderance of the evidence favors the adoption of the Cities' proposed disallowance of \$3,473,207 on a systemwide basis.

CL16. EGS's long- and short-term natural gas contracts and expenses were reasonable and necessary to provide reliable electric service to its customers during the reconciliation period, with the exception of: (a) \$62,958 in spot-gas purchases at Willow Glen in March 1994, which EGS failed to show was reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I), and (b) \$3,473,207 in short-term natural gas expenditures for which EGS failed to meet its burden of proof in demonstrating that such expenses were reasonable and necessary.

5. Findings of Fact Nos. 183, 184 and 185 are deleted because, as discussed in Section IV of this Order, these findings are not supported by the preponderance of evidence. Findings of Fact Nos. 183A, 183B, 183C, 183D, 183E and 183F and Conclusion of Law No. 17A are added to reflect the Commission's findings regarding forced outage FO-94-01.

FF183A. The evidence presented by the Cities demonstrates that the validity of EGS's after-the-fact calculation of the effect of the process noise on the improperly installed Rosemount Model 1153 transmitters is, at best, questionable; thus, EGS has not established that the transmitters were not the cause of FO-94-01.

FF183B. In its response to the NRC regarding FO-94-01, EGS concluded that the reasons for the violations were due to an “oversight on the part of engineering” and because “the maintenance planner did not properly plan the maintenance work order.”

FF183C. EGS admitted in contemporaneous correspondence with the NRC that the reason for the spurious reactor trip on September 8, 1994 was because the improperly installed transmitters were overly sensitive to process noise.

FF183D. The problem with the Rosemount 1153 transmitters with little or no damping being susceptible to false indications due to process noise was identified as early as April 1988 when SIL 463 was issued.

FF183E. Given that EGS personnel installed the transmitters improperly, that there were known problems with the improperly installed transmitters, and that EGS did not establish that the improperly installed transmitters were not the cause of FO-94-01, it follows that the improperly installed transmitters were the cause of FO-94-01.

FF183F. The improper installation of the Rosemount 1153 transmitters was due to imprudent management on the part of EGS. Therefore, the associated replacement power costs were not reasonable and necessary expenses, and a disallowance of \$1,519,787 on a systemwide basis is appropriate.

CL17A. EGS failed to show that \$1,519,787 of replacement power costs associated with forced outage FO-94-01 were reasonable and necessary as required by P.U.C. SUBST. R. 23.23(b)(3)(B)(i)(I).

6. Findings of Fact Nos. 188 and 191 are modified as shown below and Findings of Fact Nos. 189, 190, and 192 are deleted because, as discussed in Section V of this Order, these findings are not supported by the preponderance of evidence. Findings of Fact Nos. 188A, 188B, 188C and 188D and Conclusion of Law No. 17B are added to reflect the Commission’s findings regarding forced outage FO-94-02.
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FF188. The new recirculation pump seal design failed due to accelerated wear caused by particles in the reactor cooling water at RBNS

FF191. A “crud burst” is a phenomenon that occurs in water systems due to particulate accumulation on the inside surfaces of water pipes during normal operation

FF188A. EGS did not properly inform MPR about purge water quality data or the possibility of a crud burst occurring. Had the consultant been properly informed, MPR’s report indicates that it would have recommended silicon carbide rather than the tungsten-carbide that eventually failed and caused forced outage FO-94-02

FF188B. The risk assessment performed by EGS management for use of tungsten-carbide versus silicon carbide seals was not adequate because no criteria for particulate levels was defined by the vendor or asked for by design engineering

FF188C. A reasonable utility manager would have employed all relevant information available at the time in its assessment of the risk of using of tungsten-carbide versus silicon-carbide seals. EGS failure to perform an adequate risk analysis constitutes imprudence.

FF188D. Because forced outage FO-94-02 was the result of imprudent management on the part of EGS, the associated replacement power costs were not reasonable and necessary expenses. Therefore, a disallowance of \$545,548 on a systemwide basis is appropriate.

CL17B. EGS failed to show that \$545,548 of replacement power costs associated with forced outage FO-94-02 were reasonable and necessary as required by P U C SUBST. R. 23.23(b)(3)(B)(i)(I).

7. Findings of Fact Nos. 198 and 199 are deleted because, as discussed in Section VI of this Order, these findings are not supported by the preponderance of evidence Findings of Fact Nos. 199A, 199B, 199C, 199D, and 199E and Conclusions of Law Nos 9A and 17C are added to reflect the Commission’s findings regarding forced outage FO-94-03

FF199A. A contributing cause to the human error causing forced outage FO-94-03 was the improper modification of verification step procedures by EGS management. By removing the verification procedures, EGS management set up an independent verification method that established a work practice that was, as stated by EGS, "less than adequate."

FF199B. The decision by EGS management to remove the verification procedure was not reasonable in light of the circumstances, information and options available at the time, and was therefore imprudent.

FF199C. The actions and decisions of EGS's technicians that led to forced outage FO-94-03 were controllable and/or affected by EGS management.

FF199D. The ultimate performance of a utility's technicians is a function of the adequacy and reasonableness of the utility's management. With respect to FO-94-03, EGS's management was neither adequate nor reasonable because EGS management did not have in place the basic procedures or the necessary safeguards to prevent such a catastrophic event from occurring as the result of such a simple mistake.

FF199E. Because forced outage FO-94-03 was the result of imprudent management on the part of EGS, the associated replacement power costs were not reasonable and necessary expenses. Therefore, a disallowance of \$657,386 on a systemwide basis is appropriate.

CL9A. Utility management is responsible for the work-related actions and decisions of its employees. Utility management is responsible for establishing, monitoring and enforcing appropriate operations and procedures and for ensuring that its employees perform up to those standards. Inadequate, substandard, or otherwise inappropriate work methods or products reflect the cumulative actions and decisions of utility management.

CL17C. EGS failed to show that \$657,386 of replacement power costs associated with forced outage FO-94-03 were reasonable and necessary as required by P U C SUBST. R. 23.23(b)(3)(B)(i)(I).

8. Finding of Fact No. 214A is added to more thoroughly reflect the ALJ's recommendation as discussed in Section XI.C.2. of the PFD

FF214A. EGS did not present sufficient evidence to show that it needed the capacity as required by P.U.C. SUBST. R. 23.66(d)(1)(D) when it renegotiated the Agrilectric contract in 1994.

9. Proposed Findings of Fact Nos. 245 and 247 are modified to be consistent with the Commission's decisions regarding the time periods for surcharges and/or refunds and to reference the calculated surcharge and/or refund contained in the schedules attached to this Order.

FF245. EGS continues in a state of material under-collection of its fuel costs and is in the process of surcharging its net fuel cost under-recovery as calculated in the schedules attached to this Order, including interest, during the billing months of May and June 1997.

FF247. Consistent with the findings in this Order, it is appropriate for EGS to refund to its Texas retail non-fixed fuel factor customers the amounts contained in the schedules attached to this Order, with interest, during the first practical billing cycle subsequent to this Order.

10. Proposed Finding of Fact No. 9 is modified as follows to clarify the language in P.U.C. SUBST. R. 23.23(b)(3)(D) regarding the procedural schedule for a fuel reconciliation

FF9. EGS voluntarily extended the procedural schedule in this case in an effort to accommodate the Commission's issuance of a final order in the case by January 31, 1997; however, P.U.C. SUBST. R. 23.23(b)(3)(D) does not impose a jurisdictional deadline that requires the Commission to issue a final order within the one-year time frame subsequent to filing of a materially complete petition by the utility.

11. Proposed Findings of Fact Nos. 235, 236, 237, 238, and 246 and Conclusions of Law Nos. 21, 22 and 23 are deleted because the total fuel expenditures and disallowances authorized

by the Commission in this Order differ from the total fuel expenditures and disallowances proposed by the ALJ in his PFD.

12. Conclusions of Law Nos. 12 and 17 are modified for the purpose of clarification, as discussed in Section I of this Order.

CL12. Because the stipulation and final order in Docket No 13170 specifically reserved, in a non-contested proceeding, the review of the reasonableness of certain fuel issues, *res judicata* does not preclude the consideration of those issues in this docket

CL17. EGS failed to show that 12 94 days of Refueling Outage 5 (RF-5) at River Bend Nuclear Station (RBNS) were prudently planned and managed, therefore, EGS's replacement purchased power costs for that portion of RF-5 were not reasonable and necessary as required by P.U.C. SUBST R 23 23(b)(3)(B)(i)(I) Under traditional cost-of-service rate regulation applicable to EGS, EGS ratepayers should bear the risk of costs associated with an extended forced outage that is not caused in whole or in part by imprudent management. However, implementation in the future of a variation of cost-of-service-based regulation, such as performance-based regulation, may necessitate deviating from the traditional application of the prudence standard

13. Conclusion of Law 15A is added to reflect the Commission's determination regarding a utility's obligation to pursue the renegotiation of fuel and fuel-related contracts

CL15A. A utility has a continual obligation to reasonably pursue the renegotiation of above-market contracts on behalf of its ratepayers Accordingly, in a fuel reconciliation proceeding, a utility has the burden of proving that its contract renegotiation efforts (or lack thereof) were reasonable in light of its particular contractual obligations and other relevant circumstances.



## IX. Findings of Fact and Conclusions of Law

### A. Findings of Fact

1. On December 7, 1995, Entergy-Gulf States, Inc., (EGS) filed an application with the Public Utility Commission of Texas (Commission) requesting approval of total fuel and purchased-power costs of approximately \$318 million. All of EGS's customers in all areas served by it in Texas will be affected by this application.

2. With its application, EGS also requests authorization to defer the collection of its under-recovered fuel expense of \$22,375,752, to be collected through a surcharge in a future proceeding. Alternatively, EGS proposes collection of its under-recovered fuel expenses through a surcharge of \$22,275,752, less any Commission-authorized fuel cost disallowances, over a 12-month period.

3. EGS provided both published and direct mail notice of its application, as well as direct written notice to all of the parties in its last fuel reconciliation proceeding, *Application of Gulf States Utilities Company to Reconcile Fuel Costs*, Docket No. 13170, 20 P.U.C. BULL. 1026 (April 18, 1995) (mem.).

- a. On January 31, 1996, EGS began providing published notice once a week for two consecutive weeks in newspapers of general circulation in each of the counties in its service area affected by the application. EGS completed published notice on September 4, 1996.
- b. On February 6, 1996, EGS provided direct mail notice of its application to all of its retail customers in the form of an insert in monthly bills.
- c. On June 4, 1996, EGS provided direct mail notice of its application to its large industrial customers affected by the application.
- d. On August 14, 1996, EGS filed initial affidavits attesting that it provided published notice and direct mail notice to its retail customers, as well as direct written notice to the parties in Docket No. 13170.

- e. On September 23, 1996, EGS filed revised affidavits attesting that published notice of its application had been completed.
4. The following parties intervened: Certain Cities<sup>35</sup> served by EGS (Cities); North Star Steel Texas, Inc., (North Star); Texas Industrial Energy Consumers (TIEC); the State of Texas; the Office of Public Utility Counsel (OPC); and the Commission's General Counsel. The State of Texas withdrew on July 17, 1996. TIEC did not actively participate in the hearing, but did monitor certain issues.
5. On January 9, 1996, the Commission transferred this case to the State Office Of Administrative Hearings (SOAH) to conduct a hearing and prepare a Proposal for Decision (PFD) with findings of fact and conclusions of law.
6. On January 22, 1996, the Administrative Law Judge (ALJ) held the initial prehearing conference and adopted a protective order. On February 5, 1996, the Protective Order was modified and adopted.
7. On February 26, 1996, the Commission issued the Preliminary Order, including issues to be addressed and areas not to be addressed at the hearing.
8. The hearing on the merits was convened on September 9, 1996, and concluded on October 8, 1996.
9. EGS voluntarily extended the procedural schedule in this case in an effort to accommodate the Commission's issuance of a final order in the case by January 31, 1997; however, P.U.C. SUBST. R. 23.23(b)(3)(D) does not impose a jurisdictional deadline that requires the Commission to issue a final order within the one-year time frame subsequent to filing of a materially complete petition by the utility.

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<sup>35</sup> The Cities include Port Neches, Groves, Nome, Vidor, Beaumont, China, Conroe, Port Arthur, and Nederland.