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Decision 91-04-060 April 24, 1991

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of)
Pacific Gas and Electric Company) Application 90-03-002
for Approval of Electric Service) (Filed March 1, 1990)
Agreement with Norcal Frozen Foods,)
Inc. d/b/a Norcal/Corsetti Foods.)

Louis Vincent, Attorney at Law, for
Pacific Gas and Electric Company,
applicant.
Barkovich & Yap, by Barbara Barkovich,
for California Large Energy Consumer
Association; Joseph G. Meyer, for
Joseph Meyer Associates; Joel R.
Singer, Attorney at Law, for Toward
Utility Rate Normalization (TURN);
interested parties.

Kathleen Maloney, Attorney at Law,
Division of Ratepayer Advocates.

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Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The *Agrobacterium* strains were grown in YEA medium for 24 h at 28°C. The cell concentration was adjusted to 10⁸ cells/ml. The cells were then mixed with the plant tissue and incubated for 24 h at 28°C. The plant tissue was then cultured on the selective medium. The transformation efficiency was determined as the number of transformants per 100 mg of plant tissue. The data are the mean ± SD of three independent experiments.

[illegible]

Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group and the experimental group. The control group was divided into two subgroups: the control group and the experimental group. The experimental group was divided into two subgroups: the control group and the experimental group.

Figure 1. The effect of the concentration of the H_2O_2 solution on the amount of the released H_2 gas from the H_2 gas-generating system.

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

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In accordance with a contract between Norcal and WCP executed in January 1989, WCP provides process steam to Norcal. The contract originally called for WCP to provide firm electric service to Norcal at discounted rates, but deliveries of electricity have not been made. In October 1989 the contract was amended to remove the obligation of WCP to serve electrical power to Norcal. The obligation to provide process steam remains in place.

In January 1990 PG&E and Norcal signed the Agreement, under which Norcal would receive nonfirm service from PG&E for five years. Service would be at primary voltage levels and at tariff rates. The transformer and other facilities necessary for primary service would be given to Norcal by PG&E. Norcal would also receive from PG&E a \$180,596 payment for conservation projects by Norcal. PG&E believes the Agreement is necessary to prevent Norcal from again pursuing service from WCP and bypassing the PG&E system. If the Agreement is approved, WCP would deliver its excess power to PG&E under the PPA.

Procedural Background

On March 1, 1990 PG&E filed the present application under the Commission's Expedited Application Docket (EAD), seeking accelerated approval of the Agreement.

On March 21, 1990 the Division of Ratepayer Advocates (DRA) protested the application, listing eleven issues to be discussed at the workshop required by EAD procedures.

A workshop was held before assigned Administrative Law Judge (ALJ) James Weil on April 12, 1990. During the workshop many of DRA's concerns were resolved, but DRA remained unconvinced that the Agreement would result in a positive contribution to margin (CTM), which DRA believes is the appropriate measure of net ratepayer benefits flowing from the Agreement. CTM is basically the net utility revenues from the Agreement, in excess of utility incremental costs to provide the electric service required. At the

conclusion of the workshop the ALJ ordered further analysis of the long-term Agreement revenues. PG&E provided the necessary analysis, followed by revisions after review by DRA.

On May 22, 1990 DRA wrote the ALJ to state that it was unable to withdraw its protest, and requested the matter be set for evidentiary hearings. By ruling dated June 18, 1990 the ALJ removed the application from the EAD and ordered hearings.

A prehearing conference was held on July 3, 1990. Prepared testimony was served by PG&E and DRA, and three days of hearings were held during October 1990. PG&E and DRA filed opening briefs on November 30, 1990. The proceeding was submitted on December 14, 1990, on receipt of reply briefs from the same two parties.

Terms of Service to Norcal

Norcal now receives both firm and nonfirm service from PG&E at the secondary voltage level. Secondary level rates are generally higher than primary level rates.

If Norcal bypasses the PG&E system and takes service under terms similar to those in its original contract with WCP, it would receive firm service, but at rates discounted 20% below Norcal's existing PG&E tariffs. Physically, power would be delivered from WCP's cogeneration plant on Norcal's property. When the cogeneration plant is out of service, WCP would be obliged to continue service to Norcal by purchasing standby power from PG&E. It is uncertain who would be the standby customer of record with PG&E. Under this bypass scenario, WCP would continue to sell firm power to PG&E under its PPA, but WCP would reduce its sales of as-delivered power to PG&E in order to serve Norcal. PG&E claims that bypass would result in underutilization of certain distribution facilities dedicated to serving Norcal.

If Norcal declines service from WCP in favor of the Agreement, Norcal would receive primary level, nonfirm service from PG&E at tariff rates. Norcal's executive vice president Ray Walker

testified that Norcal is economically indifferent to service from WCP or PG&E, but it would prefer service from PG&E. Norcal perceives better reliability from PG&E, even considering the change to nonfirm service. Norcal's energy cost savings would be about \$300,000 annually in either circumstance, relative to secondary voltage service at present rates. The \$180,596 conservation payment was designed by PG&E to match Norcal's cost of reduced service quality from firm to nonfirm. The Agreement also requires transfer of primary facilities from PG&E to Norcal. Those facilities comprise about \$60,000 of existing equipment (one transformer and various poles and hardware) and an estimated \$40,000 in new facilities.

Positions of the Parties

PG&E

PG&E asserts it negotiated the Agreement in order to retain Norcal as a customer. Completion of the cogeneration plant and the contract between Norcal and WCP demonstrate that Norcal's bypass threat is viable and imminent. PG&E argues that the bypass alternative is uneconomic because Norcal's bypass rate option (the negotiated charges for service from WCP) is higher than PG&E's marginal cost to serve.

PG&E claims approval of the Agreement will result in \$855,641 in net present value benefits to all ratepayers over the term of the Agreement. This amount is 15-20% of the total discounted revenues Norcal would pay PG&E if it stayed on tariff service. The \$855,641 net benefit is calculated assuming that transmission costs are included in PG&E's marginal costs. PG&E argues that customer-specific marginal costs should be used in calculating CTM. PG&E witness Wayne Rechnitz testified that marginal transmission and distribution (T&D) costs in Norcal's specific situation are zero, because no facilities would be built in order to serve Norcal. Nevertheless, PG&E included transmission

costs in its calculations to show that net benefits exist even under that assumption.

The two most important transactions in determining CTM are direct CTM from the Agreement and CTM lost to WCP under the PPA. PG&E's calculation of net benefits uses a "ratemaking" assumption for values of Energy Reliability Index (ERI). The ERI is a measure of the utility's need for additional capacity, with a value of zero indicating no such need and a value of one indicating an immediate need. In the "ratemaking" scenario, the ERI used in calculation of CTM from the Agreement is taken from PG&E's 1990 general rate case, but the ERI used in calculation of PPA payments to WCP is taken from PG&E's Energy Cost Adjustment Clause (ECAC) proceeding. PG&E claims that use of different ERI values is consistent with the Commission's adopted assumptions in those separate proceedings. If only general rate case assumptions were used, the net benefit would be reduced from \$855,641 to \$657,588. If only ECAC values of ERI were used, the net benefit would be \$762,137.

In its Opening Brief, PG&E claims the \$180,586 conservation payment in the Agreement will allow Norcal to install energy efficiency projects which save 2.7 million kilowatt-hours (kWh) of energy annually and reduce peak demand by 560 kilowatts (kW). The conservation payment would be made only upon implementation of conservation projects, but the Agreement does not require Norcal to take any specific conservation actions.

DRA

DRA's fundamental argument against the Agreement is that ratepayers would be worse off. DRA had PG&E rerun its calculation of CTM using DRA's input assumptions. Based on the recalculation using DRA's preferred ECAC assumptions regarding ERI values, DRA believes the Agreement would yield a net loss to ratepayers of \$404,419. Use of general rate case or "ratemaking" values of ERI

would change net losses to ratepayers, to \$510,690 or \$310,925 respectively.

The most important factor affecting the dispute over CTM is the inclusion of marginal T&D costs. DRA argues that these costs should be included because they are specified in the Commission's special contract guidelines and have been included in consideration of other special contracts by the Commission. DRA notes that even PG&E included those costs in its application, and removed them only when recalculation of benefits showed a loss to ratepayers. The impact of marginal T&D costs is about \$1 million over the term of the Agreement, over and above the transmission impacts assumed by PG&E.

DRA is also concerned about the "murky" status of Norcal's bypass threat. Before October 1989 the contract between Norcal and WCP was in full effect. Since then the contract amendment has removed WCP's obligation to provide electric service to Norcal. If the Commission does not approve the Agreement, it is not clear whether Norcal will still be able to bypass the PG&E system and take service from WCP. WCP's intentions are not clear except that it supports approval of the Agreement and would benefit from not having to serve Norcal. DRA is disturbed that PG&E failed to seek approval of the Agreement while the bypass threat was clearly viable, and that PG&E does not admit directly that viability of the bypass threat is now in question.

DRA witness Byron Shovlain raised the issue of preferential treatment inherent in special contracts:

"Special contracts by definition discriminate against other customers and in favor of the chosen customer. This is inequitable and only truly great benefits for other ratepayers can justify it." (Exhibit 13, page 8.)

DRA argues that even if the Commission adopts PG&E's analytical assumptions, the Agreement should be denied because risks to ratepayers are too great.

DRA argues that PG&E's calculation of overall benefits contains a \$108,000 error that was admitted in testimony by PG&E witness Shelly Malekos.

Other Parties

WCP favors Commission approval of the Agreement. WCP can still sell its excess power to PG&E on an as-delivered basis, and WCP would be relieved of the obligation to construct interconnection facilities between its cogeneration plant and Norcal's loads. WCP billing costs would also be reduced. Bonneville Treasurer Todd Stevens testified that WCP is negotiating a second amendment to its PPA with PG&E "in order to serve Norcal in the unlikely event that the CPUC does not approve [the Agreement]."

California Large Energy Consumer Association stated that if the Commission approves the Agreement, then such approval should not constitute endorsement of PG&E's supporting calculations, especially assumptions concerning numbers of customer interruptions and curtailments.

Standard of Review

Both PG&E and DRA have analyzed the Agreement first by looking at the Commission's guidelines for approval of special sales contracts, then by calculating net CTM from the Agreement.

Special contract guidelines were ordered in Decision (D.) 88-03-008¹. The guidelines require a minimum customer demand of 1 MW, a maximum contract term of five years, not extending into any period when the utility needs to add capacity, and time-of-use terms in the pricing provisions. The guidelines also require a floor price with: (1) a minimum energy price of the utility's Standard Offer No. 1 energy price, (2) a minimum T&D component taken from marginal T&D costs in the utility's most

1 27 CPUC 2d 464, 488 (1988).

recent general rate case, and (3) a minimum generation component of the utility's Standard Offer No. 1 capacity price, including the most recent ERI adjustment. In the pricing of power purchased by PG&E from qualifying facilities, capacity prices are set equal to the utility's marginal cost of capacity times the ERI. For pricing purposes, the ERI has a lower limit of 0.4, because even if the utility needs no added capacity the delivered capacity does have value. PG&E and DRA do not dispute that the Agreement meets the guidelines.

PG&E and DRA believe the Agreement should be approved only if ratepayers will benefit. The testimony of the parties addressed calculation of CTM. PG&E believes the Agreement will produce a positive CTM. DRA disagrees, claiming that PG&E's assumptions regarding the ERI and marginal T&D costs are incorrect.

Unfortunately, in their analyses of CTM both parties have lost sight of the basic principles behind the special contract guidelines. Special sales contracts should be approved only if they are necessary to prevent uneconomic bypass² by a customer, or if substantial ratepayer benefits will result. The notion that uneconomic bypass should be avoided depends on deferral or displacement of construction of customer facilities that could be built less expensively by the utility.

2 Characterization of bypass as economic or uneconomic depends on the relationship among three variables: utility incremental cost, customer incremental cost, and tariff rates. The incentive to bypass at all arises when tariff rates are higher than customer incremental cost (i.e. utility service is more expensive than obtaining service by self generation or from others). That bypass is uneconomic if utility incremental cost is less than customer incremental cost; the customer should not be encouraged to build or cause to be built additional generating capacity if the utility could do so at a lower cost. Bypass is economic if utility incremental cost is higher than customer incremental cost; society is best served by allowing the customer to leave the utility system to generate less expensive power.

In the present circumstances there is no deferral of construction. The cogeneration plant has already been built; long run utility generation costs to serve Norcal are matched by reduced generation costs for the transaction with WCP. PG&E testified that its short run T&D costs would not change, but T&D costs should eventually be reduced due to construction of the cogeneration plant. Today's T&D system may be overbuilt, in order to serve Norcal and accept deliveries from WCP, but in the long run the facilities for one or the other of those transactions will be reduced in size. There is no evidence that long run incremental T&D costs for Norcal's loads will differ from the costs for the WCP plant, which is on the same site.

Characterization of Norcal's bypass as economic or uneconomic has no meaning when there are no long run incremental costs. Bypass by Norcal would be neither economic nor uneconomic.

The requirement that the Agreement show a positive CTM is still reasonable, because CTM is a measure of ratepayer benefits. In conventional bypass circumstances the calculations of CTM should include long run incremental costs because bypass, even by a single customer, can (and should) affect long run system planning. However, in Norcal's case there will be no long run impacts on planning.

The correct calculation of CTM should compare revenues under the bypass and no-bypass scenarios, without consideration of utility costs. If Norcal does bypass, PG&E will receive revenues from standby service when the cogeneration plant is not operating. Under the Agreement, PG&E will receive revenues from Norcal and incur incremental PPA costs to WCP. The only possible adjustments to this comparison are: (1) the cost of any added reliability that Norcal would receive as PG&E buys WCP power at one level of quality and delivers it to Norcal at a different level, and (2) costs associated with serving primary level power to Norcal rather than

standby power to WCP. These added costs are likely to be quite small.

During hearings both PG&E and DRA vigorously litigated the issue of inclusion of marginal T&D costs, while overlooking the fact that costs and benefits need consider only revenues. The appropriate calculations are not in evidence.

We emphatically do not conclude that long run incremental costs are irrelevant to bypass in general or that customer-specific, short run, incremental costs are the appropriate standard for any bypass situation. However, in Norcal's situation, where long run utility costs for the PG&E-Norcal transaction are offset by long run utility savings from the PG&E-WCP transaction, the calculation of long run incremental costs is irrelevant.

Due to the unique facts in this proceeding, the correct standard of review is first to verify the credibility of the bypass threat, then to assess whether society in general will benefit from the Agreement, and finally to determine whether there are substantial net ratepayer benefits from the Agreement. That determination should include consideration of cash flows to the utility and the costs of preferential rate treatment for individual customers. The Agreement must meet all these criteria for the Commission to grant approval.

Discussion

Credibility of the Bypass Threat

PG&E argues that Norcal's bypass alternative, to pursue electric service from WCP, is viable and imminent. At the time the Agreement was executed that was certainly true. The terms of the January 1989 contract between Norcal and WCP clearly indicate the intentions of those two parties, and the present operation of the cogeneration plant shows the necessary mechanical capability.

However, the contract has been amended to relieve WCP of its obligation to provide electric service to Norcal. DRA points out this weakening of the bypass threat, recommending that the

Commission should reject any argument for approval "simply because Norcal may have lost its opportunity to bypass with WCP, and thus will have no rate discount available if the Agreement is not approved."

Although WCP's binding obligation to serve Norcal has been removed by the amendment to the WCP-Norcal contract, we are nonetheless convinced the bypass threat is credible. Norcal's intentions to bypass are clear, and WCP shows a willingness to cooperate with Norcal if the Agreement is not approved. It seems unlikely WCP would now vigorously oppose bypass, given its original contract with Norcal, the continuing provision of steam service under the contract, and the location of WCP's cogeneration plant on Norcal's property. The willingness of WCP to abandon electric service to Norcal inserts the possibility that WCP would financially benefit by approval of the Agreement, but that possibility is not enough to remove the bypass threat.

Costs and Benefits

In accordance with the standard of review for this application, we will next look for net societal benefits from the Agreement, then consider the balance of benefits and costs to ratepayers. For present purposes we assume society is represented by the union of three parties: Norcal, WCP, and ratepayers. We realize there are members of society who are not PG&E ratepayers, but the impacts of the Agreement do not seem to extend beyond PG&E's service territory, and virtually all citizens within that area are consumers of electric service, either directly or indirectly.

Our analysis of the Agreement is summarized on Table 1 below. The table entries are benefits and costs relative to the bypass scenario under which Norcal would take service from WCP, not relative to present circumstances.

TABLE 1

Benefits and Costs of PG&E/Norcal Agreement
Relative to Norcal receiving service from WCP

	Norcal	+	WCP	+	Ratepayers	-	Society
BENEFITS	Conservation benefits Primary facilities transferred from PG&E		Foregone inter- connection costs Foregone billing expenses Possible revenue for as- delivered power		Conservation benefits Nonfirm deliveries Possible CTM Five year commitment		Conservation benefits Foregone inter- connection costs Foregone billing expenses
COSTS	Nonfirm service Five year commitment		Possible CTM		Conservation payment Primary facilities transferred to Norcal Possible revenue for as-delivered power Reduced rate fairness		Conservation payment Reduced rate fairness

Norcal states that it is economically indifferent to receiving service from PG&E or WCP. Although Norcal would reduce its costs relative to present rates, Table 1 shows no reduced costs relative to the bypass scenario. Norcal's benefits from the Agreement are the conservation payment and the transferred primary facilities. If we assume Norcal implements the intended conservation projects, then Norcal's benefit of the conservation payment is replaced by conservation benefits, presumably lower energy bills. Norcal also perceives that PG&E service is more reliable than service from WCP, but we do not list this as a benefit. Norcal would receive standby service from PG&E, with all the reliability associated with the utility system.

The conservation benefits claimed by PG&E are uncertain. The energy and capacity benefits cited attach to only one of the six "example" conservation projects shown in PG&E's application, a project costing more than the \$180,596 payment. Norcal is not required to implement any conservation measures, in which case the payment amounts revert to PG&E.

Norcal's disbenefits (costs) are reduction of service level from firm to nonfirm service, and the guarantee of continued PG&E service for five years, during which time it could not accept other bypass opportunities. It is unlikely that Norcal perceives the reduction of service level to be a major risk, because by the terms of the special contract guidelines the Agreement does not extend into periods when PG&E will be short of capacity.

We note that some of the costs and benefits shown in Table 1 have "zero sum" character, meaning that benefits to one party must be offset by costs to another. Other benefits or costs are actually created by the Agreement, not offset by other parties. Norcal's conservation benefits are offset in part by the conservation payment made by ratepayers, but the values of the benefits and the payment are different. Norcal's primary facilities benefit is matched by a ratepayer cost. The nonfirm

service cost to Norcal, although small, is approximated by nonfirm deliveries paid for by ratepayers, shown as a cost reduction benefit for ratepayers. The five-year Agreement duration is also a ratepayer benefit, as protection against bypass.

WCP benefits from the Agreement by not needing to build interconnection and metering facilities and by foregone billing costs. We assume the administrative costs of dealing with PG&E for sale of the power in question are small, because WCP already administers its PPA with PG&E for both firm and as-delivered power. The record evidence does not show clearly that WCP benefits financially from the Agreement. WCP's willingness to support the Agreement hints at financial gain, which is shown as "Possible revenue for as-delivered power" on Table 1. If WCP would actually lose money by the Agreement, then possible losses are shown as "Possible CTM" on Table 1. Both of these possibilities arise from the difference in cash flows between selling the same power to PG&E or Norcal, but we apply different names to show possible impacts on ratepayers.

Because Norcal is economically indifferent to the Agreement, the zero sum impacts of WCP's gains or losses must accrue to ratepayers. If WCP accepts a loss, then ratepayers gain, and that gain is exactly the CTM that PG&E believes exists. However, WCP's acceptance of the Agreement leads us to believe that if there is a positive CTM for ratepayers, its value must be small, not exceeding WCP's reduced costs for interconnection facilities and billing. Bonneville witness Stevens testified that the capital cost of the interconnection facilities would be \$250,000, but Exhibit 16, upon which he relied, contains a calculational error. Correction of the error and confirmation elsewhere in Exhibit 16 indicate that the interconnection facilities would cost \$150,000. Billing expenses for five years would likely be a lesser amount.

Ratepayers also benefit from Norcal's conservation projects, but comparison with the conservation payment is

uncertain. Ratepayers make the entire payment but receive only some of the benefits. The direct benefits of incremental conservation spending accrue to Norcal, but ratepayers receive general social benefits such as improved air quality and reduced need for new generating plants. At the same time, PG&E's rates are now higher than utility marginal costs, and there are (at least theoretically) disbenefits to ratepayers if PG&E declines to produce power inexpensively in order to sell it at rates higher than marginal costs. We do not encourage this scenario, but we mention it to show that costs and benefits of the conservation element of the Agreement are complicated. We are convinced that, as a general proposition, net societal benefits accrue from cost effective conservation programs. This is the basis for our continuing policy to encourage conservation. The immediate issue, which we have addressed in other proceedings, is one of fairness. How much should ratepayers pay for conservation benefits that flow to individual customers?

Again inspecting Table 1, ratepayers receive as benefits the items which offset Norcal's costs of nonfirm service and the five-year duration of the Agreement. Ratepayer costs are the conservation payment, the transfer of primary facilities, and reduced rate fairness due to preferential treatment of Norcal. Ratepayer benefits or costs related to WCP's cash flows are uncertain.

Other ratepayer risks may also be incurred, but we exclude them from Table 1 because they are speculative. First, ratepayers might be harmed by the Agreement if PG&E does need additional capacity within five years. Second, if the Agreement is not approved, PG&E might pursue additional incentive conservation projects with Norcal. The present incentive program can generate ratepayer payments to PG&E shareholders, heretofore excluded from Table 1.

Returning to our standard of review, Table 1 shows societal net benefits and costs as the sum of the benefits and costs for Norcal, WCP, and ratepayers. After the zero sum items are eliminated, we see that society as a whole: (1) receives conservation benefits in exchange for the conservation payment, (2) is relieved of the need for interconnection facilities and billing expense, and (3) incurs the unfairness inherent in preferential treatment of individual customers. Although we cannot quantify all these benefits and costs, we are convinced that conservation benefits would generally exceed conservation costs. The interconnection and billing savings amount to slightly more than \$150,000. The general cost of reduced rate fairness cannot be quantified, but it should be considered in relation to the net benefits to Norcal.

We find the Agreement, taken as a whole would yield net societal benefits, although their magnitude is not impressive in relation to the revenue reduction conceded to Norcal.

Turning to the balance of ratepayer benefits and costs, conservation benefits are less than the full conservation payment because most of the incremental benefits accrue to Norcal rather than to ratepayers. The question of whether CTM benefits or as-delivered revenue losses will actually occur is difficult to answer, as discussed from WCP's perspective above. The Agreement will have no impact on PG&E's actual costs for generation, transmission, and distribution. This leads us to the WCP transaction in search of CTM which might benefit ratepayers. WCP's actions suggest that if there were a net CTM, as PG&E claims, its value would not be substantially more than WCP's foregone costs of slightly more than \$150,000. A ratepayer loss of revenues due to increased as-delivered payments to WCP, as DRA claims, is consistent with WCP's encouragement of the Agreement. Based on the evidentiary record, we can find only that CTM benefits to ratepayers are unproven.

The value to ratepayers of PG&E making nonfirm instead of firm deliveries to Norcal is small, in the same way that the reduced benefit of nonfirm service to Norcal is small. Curtailments during the term of the Agreement are unlikely. If Norcal's value of service approximates PG&E's costs, then the ratepayer value is \$180,596, the amount of the conservation payment. However, Norcal's value of service could exceed PG&E's incremental cost. The value of the five-year Agreement duration and the cost of rate unfairness cannot be quantified. The cost of the primary facilities is \$100,000.

We find the Agreement taken as a whole would not provide enough ratepayer benefits to overcome direct costs to ratepayers and the general costs of preferential treatment for Norcal. We will deny approval of the Agreement.

Having decided to deny approval, we need not resolve the several technical issues brought forward by PG&E and DRA. Arguments over inclusion of marginal transmission and distribution costs are irrelevant because Norcal's bypass would be neither economic nor uneconomic. The lesser issues of choice of ERI, the \$108,000 error alleged in PG&E's testimony, incremental conservation benefits induced by the conservation payment, and assumptions about customer interruptions and curtailments are moot.

Comments on Proposed Decision

On February 28, 1991, the ALJ's proposed decision in this matter was filed with the Docket Office and mailed to all parties in accordance with Rule 77 of the Commission's Rules of Practice and Procedure. Timely comments were filed by PG&E and DRA. Only DRA filed reply comments.

Having reviewed the comments of the parties, we conclude that the ALJ's proposed decision requires no substantial revision. Approval of the Agreement should be denied. Minor clarifications and revisions to the text of the decision have been made as appropriate.

Findings of Fact

1. On March 1, 1990 PG&E filed this application in the EAD, requesting accelerated approval of the Agreement.

2. The required EAD workshop was held on April 12, 1990.

3. By ALJ Ruling the application was removed from the EAD, and three days of evidentiary hearings were held.

4. The proceeding was submitted on receipt of reply briefs on December 14, 1990.

5. Under the terms of the Agreement PG&E would provide nonfirm, primary level service to Norcal for five years. PG&E would also transfer primary voltage facilities to Norcal and provide Norcal with a \$180,596 payment for conservation projects.

6. PG&E believes the Agreement is necessary to retain Norcal as a customer.

7. PG&E argues the Agreement should be approved because: (1) Norcal's bypass threat is viable and imminent, (2) the Agreement would result in \$855,641 in net present value benefits to ratepayers, and (3) the Agreement would result in energy conservation benefits.

8. DRA argues the Agreement should not be approved because: (1) the bypass threat is questionable, (2) the Agreement would cause \$404,419 in ratepayer losses, and (3) the Agreement would cause unfair preferential rate treatment for Norcal.

9. WCP favors Commission approval of the Agreement.

10. Special sales contracts should be approved only if they are necessary to prevent uneconomic bypass by a customer, or if substantial net ratepayer benefits will result.

11. The appropriate standard of review in this unique application is first to verify the credibility of the bypass threat, next to assess whether society in general will benefit from the Agreement, and then to determine whether ratepayers will benefit from the Agreement.

12. There is no evidence in this record that the Agreement will have an impact on PG&E's long run costs for generation, transmission, and distribution.

13. WCP's cogeneration plant is complete and capable of serving up to 7.6 MW of electric service to Norcal.

14. Bypass of the PG&E system by Norcal, in favor of service from WCP, would be neither economic nor uneconomic as defined herein.

15. Although WCP's obligation to serve Norcal has been removed by the amendment to its contract with Norcal, WCP has demonstrated willingness to serve Norcal.

16. Norcal's threat of bypass is credible.

17. The benefits and costs of the Agreement relative to the bypass scenario are shown on Table 1 herein.

18. The direct benefits of the conservation payment to Norcal, if the conservation actions are implemented, will likely exceed the \$180,596 payment.

19. Incremental conservation spending of \$180,596 would not produce PG&E's claimed conservation benefits of 2.7 million kWh of energy and 560 kW of capacity.

20. The Agreement does not require Norcal to implement any conservation measures.

21. The value of the transferred primary facilities would be about \$100,000.

22. PG&E calculates the \$180,596 conservation payment to be equal to the cost to Norcal of reduced quality of service, from firm to nonfirm service.

23. Curtailments to Norcal during the term of the Agreement are unlikely.

24. The cost to Norcal of the five-year term of the Agreement, as well as its value to ratepayers, cannot be quantified from the record evidence.

25. Norcal is economically indifferent to service from WCP or PG&E.

26. Norcal prefers service from PG&E because Norcal perceives greater reliability of service from PG&E relative to service from WCP.

27. WCP's costs for interconnection facilities with Norcal and added billing expense over the term of the Agreement would be slightly more than \$150,000.

28. Apart from reduced interconnection costs and billing expenses, the zero sum impacts of WCP's gains or losses must accrue to ratepayers.

29. WCP's gains or losses due to serving Norcal rather than delivering power to PG&E under its PPA are uncertain.

30. If the Agreement were to generate any positive CTM, its value would be small, likely less than WCP's costs for interconnection facilities and billing expenses.

31. Neither PG&E nor DRA has correctly calculated CTM.

32. The issue of inclusion of marginal T&D costs in calculation of CTM is irrelevant in the unique circumstances of this application.

33. If conservation actions are implemented, ratepayers would receive general social benefits such as improved air quality and reduced need for new generating plants.

34. The value to ratepayers of reduced quality of service to Norcal would approximate its cost to Norcal.

35. The Agreement would reduce rate fairness for ratepayers due to preferential treatment of Norcal. Its cost cannot be quantified.

36. If the Agreement is approved, ratepayers could be harmed if PG&E needs additional capacity within five years.

37. If the Agreement is not approved, ratepayers could be harmed if PG&E chooses to pursue conservation incentives with Norcal which were not contemplated under the Agreement.

38. The Agreement taken as a whole would yield net societal benefits.

39. The Agreement taken as a whole would not provide enough ratepayer benefits to overcome direct costs to ratepayers and the general harm of preferential treatment for Norcal.

40. Approval of the Agreement would be averse to the best interests of ratepayers.

41. It is not necessary to resolve other technical issues brought forward by PG&E and DRA.

Conclusion of Law

The Agreement should not be approved.

O R D E R

IT IS ORDERED that:

1. Approval of the Conservation Offer Agreement between Pacific Gas and Electric Company and Norcal Frozen Foods, Incorporated is denied.

2. This proceeding is closed.

This order is effective 30 days from today.

Dated April 24, 1991, at San Francisco, California.

PATRICIA M. ECKERT
President
G. MITCHELL WILK
JOHN B. OHANIAN
DANIEL Wm. FESSLER
NORMAN D. SHUMWAY
Commissioners

I CERTIFY THAT THIS DECISION
WAS APPROVED BY THE ABOVE
COMMISSIONERS TODAY

[Signature]
NEEL J. SHULMAN, EXECUTIVE DIRECTOR