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Those Listed Below

February 28, 1963

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Rodney L. Southwick, Assistant to the
Manager for Public Information, SAN

PG&E RELEASE ON EXPANSION--CLIPS

MI:RLS

This will supplement my memorandum of February 27, 1963, transmitting the PG&E release on its expansion program. Enclosed are clippings from the N.Y. Times Western Edition and Bay Area newspapers on the announcement and news conference with PG&E President Norman E. Sutherland. Sutherland discussed the probability of about half of the new generating capacity being generated from nuclear reactors.

Enclosures:
As stated.

Addressees:

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P.G. & E. PLANNING A VAST EXPANSION

2/28/63

Its \$2,400,000,000 Program
Expected to Triple Power
Capacity by 1980

NUCLEAR REACTORS SET

Transmission System to Be
Improved — Giant New
Generators Included

By WALLACE TURNER
Special to The New York Times.

SAN FRANCISCO, Feb. 27
The Pacific Gas and Electric
Company today announced plans
to triple its generating plant
by 1980 and to improve its
transmission system, all at a
cost of \$2,400,000,000.

The company's largest invest-
or-owned gas and electric utility
in the nation, now has about
8,000,000 kilowatts of generat-
ing capacity and will add 15,
000,000 kilowatts more.

Nuclear reactors will provide
the heat for more than two-
thirds of this additional gener-
ating capacity. But the com-
pany hedged slightly on these
plans.

The heart of the expanded
power plant program will be
generators of a staggering size
—660,000 kilowatts in those
plants opened up to 1975 and
1,000,000 after that date. The
Tennessee Valley Authority has
the only other 660,000-kilowatt
generator now in use in the
United States.

The other part of the expan-
sive program in the construc-
tion of more than 1,300 miles
of 500,000-volt transmission
lines, which will be P.G.&E.'s
part of the new California pow-
er pool, in which other mem-
bers are Southern California
Edison, San Diego Electric and
Gas Company, and the Cali-
fornia Electric Power Company.

Headquarters Conference

The announcement of the ex-
pansion plans was made at a
news conference in the com-
pany's headquarters building at
245 Market Street here by Not-
man R. Sutherland, P.G.&E.
president. He said that in the
past years the company has an-
nounced its projects one at a
time, but that now it wanted
to make the public aware of its
projection of power needs
through 1980 and of plans to
meet them.

He said financing the ambi-
tious construction program will
be done the same way current
projects are built—by borrow-
ing and by investment of earn-
ings.

The most significant part of
Mr. Sutherland's announcement
was the demonstration of the
heavy reliance P.G.&E. will
place on nuclear power after
1970. By 1980, the company will
have about 24,000,000 kilowatts
of generation, and more than
10,000,000 of this will be from
nuclear reactors.

Just now P.G.&E. is slowly

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P.G. & E. PLANNING A VAST EXPANSION

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putting the first fuel load into
its 60,000-kilowatt reactor at
Humboldt Bay, at Eureka on
the northern California coast.
While the company has for sev-
eral years had an old generator
retied into an experimental re-
actor operated by the General
Electric Company at Vallejos,
Calif., the small plant at Eu-
reka actually will give P.G.&E.
its first real experience with
operating a nuclear power plant.

Mr. Sutherland said at his
press conference that the com-
pany's plans for the heavy com-
mitment to nuclear power were
subject to change if the Hum-
boldt Bay plant, or one now
nearing a construction start at
Bodega Bay, failed to operate
with the expected economies.

An Alternate Plan

If they fail to meet expecta-
tions, he said, P.G.&E. will still
build the new generation facil-
ity, but will build them to be
fueled by oil and gas.

In response to questions, Mr.
Sutherland was also drawn into
a discussion of another P.G.&E.
concern over atomic power —
the public reaction that has
been violent against Bodega
Bay. An organization led by
outdoorsmen, but with many
other members, has opposed
the construction of the 330,
000-kilowatt nuclear reactor on
a point of land jutting into the
Pacific about 50 miles north
of here.

Mr. Sutherland said he be-
lieved a nuclear reactor could
be built safely under Union
Square, a downtown block in
San Francisco.

Mr. Sutherland also was em-
phatic in his insistence that
P.G.&E. has had no Federal
subsidies—beyond the possibi-
lity of one in its fuel supply—
for the power plant it is now
building, and that there would
be none in the new plant.

The new construction sched-
ule by P.G.&E. will see it
add nine 660,000-kilowatt gen-
erators and seven 1,000,000-
kilowatt generators. The larg-
est generators now in use on
the P.G.&E. system are 330,000
kilowatts.

With a view to the require-
ments of isolation and coolant
that the nuclear plants require,
the company has picked sites
for its next atomic develop-
ments, which will come in the
1970's. These are at Nipomo,
in San Luis Obispo County, and
Moss Landing, in Monterey
County, both to the south of
here, and at Montezuma, in So-
lano County, to the east of
here on an arm of San Fran-
cisco Bay.

SP Chronicle
2/28/63
**PG&E Plans
\$2.4 Billion
Expansion**

By Donovan Bess

Pacific Gas and Electric Co. announced plans yesterday for a \$2.4 billion plant expansion that will increase its power capacity by four times in the next 17 years.

More than half of the added electricity will be generated by nuclear power, the firm's president, Norman R. Sutherland, predicted.

Sutherland told a press conference that the unprecedented long-range construction program had been based on "conservative estimates" of California's growth.

BODEGA

He said the company now "confidently expects" its nuclear-power plant at Bodega Bay will be "economically successful."

"We have been in the atomic business now for about ten years," Sutherland said. "We know these plants will run—particularly using the boiling water reactor (as at Bodega)."

He said that the company tentatively plans for nuclear power to produce about 11 million of the additional 19 million kilowatts of electricity to be generated under the new program.

The first step in this tech-

See Page 16, Col. 2

PAGE 16 Thursday, Feb. 28, 1963 FHE ★★
THE SAN FRANCISCO CHRONICLE

\$2.4 Billion Plan

PG&E Reveals Its Big Program



NORMAN SUTHERLAND
Emphasis on the atom

From Page 1

nological revolution, Sutherland said, would be doubling the capacity of the controversial Bodega plant in Sonoma county.

He released a construction schedule that calls for adding 660,000 kilowatts or more of nuclear-generated power to the Bodega plant in 1972—and for building, six years later, a super-turbine there through which one million kilowatts, or more, would be produced by power from a uranium core.

The gigantic utility company so far has never built a generating plant of any kind with a capacity of more than 330,000 kilowatts.

OTHER PLANTS

PG&E's nuclear-power blueprint would establish a number of other atomic generators in and near the Bay Area. Their total capacity would exceed 4 million kilowatts.

The first such project would be located on the coast at South Moss Landing, near Castroville in Monterey county, in 1974. It would consist of two units, each with at least 600,000-kilowatt capacity.

Sutherland said the company also hopes to build a huge nuclear plant at Montezuma, which is about 12 miles east of Vallejo in the Delta region. A million-kilowatt unit would be constructed there in 1977 and another million-kilowatt unit in 1973.

The schedule calls for a third such unit at South Moss Landing in 1980.

(Continued)

Chronicle (cont'd.)

ATOMIC

"We will depend on the atom more and more as time passes," Sutherland declared.

PG&E now used 62 hydroelectric plants that generate power from falling water and 14 thermal plants that generate power by natural

A-PLANTS

In addition, PG&E probably will develop nuclear power units at Nipomo, near Santa Maria, for generating at least 3.6 million kilowatts.

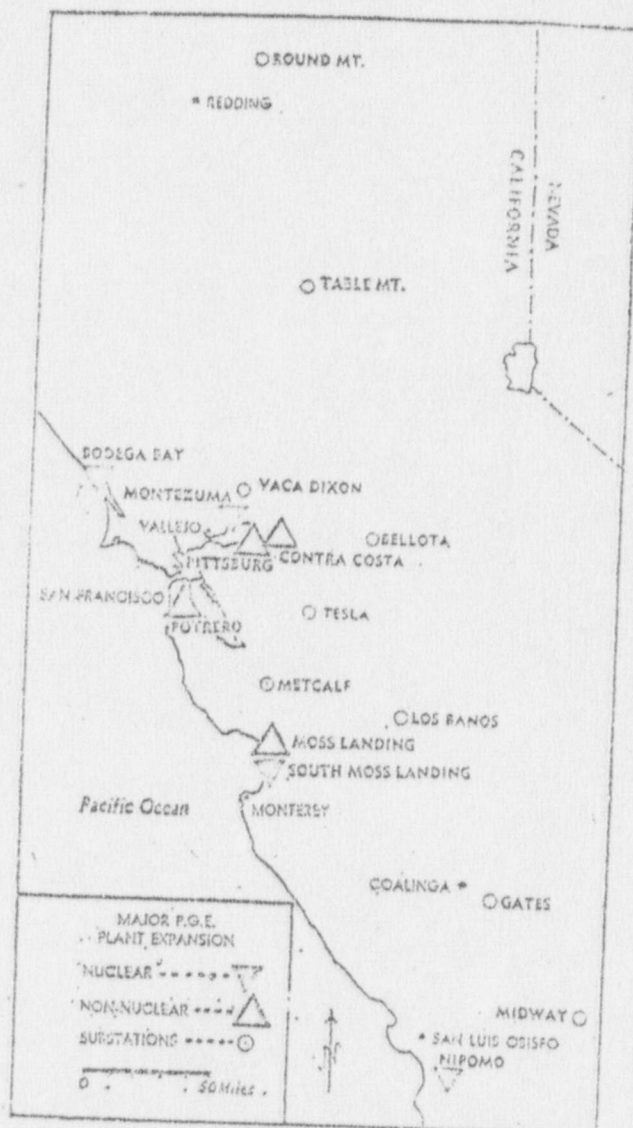
Sutherland said he did not expect sustained public opposition to the nuclear-power blueprint.

"The present fears may pass," he said. Referring to critics of the program, he declared, "When you get down to details, they show they're just not knowledgeable."

LINES

The construction schedule also includes 1200 miles of extra-high voltage transmission lines of at least 500,000 volts.

The highest transmission voltage now is 230,000 volts, but PG&E last year broke precedents by arranging with the Pacific Power and Light Co. of Oregon to build



Where PG&E plans to build its nuclear and conventional power-producing plants

gas or fuel oil. The expansion program includes 16 new generating units, including these nonnuclear plants:

- A 660,000-kilowatt unit at Moss Landing on which construction will begin soon.
- Another 660,000-kilowatt plant to be built at Moss Landing in 1967.
- A new 660,000-kilowatt unit to be added to the Pittsburg facility in 1969.
- A new 660,000-kilowatt unit to be added to the Potrero plant in San Francisco in 1971.
- A 660,000-kilowatt unit to be added to a plant near Antioch.

a 500,000-volt line from Klamath Falls into Shasta County to carry northwest power into California.

A 2.4 Billion PGE Project

A 17-Year Master Plan

SI-EX-1000000 7/28/63

A 17-year master plan for a \$2.4 billion "super system" of new generating units and extra high voltage lines was announced yesterday by Pacific Gas & Electric Co.

The expansion, termed by PG&E President Norman R. Sutherland as "by far" the largest private power construction program ever undertaken in California, calls for:

- More than 1,300 miles of 500,000 volt transmission lines capable of carrying at least three times as much power as the company's present 230,000 volt carrier system.

- Construction of 16 new thermal generating units, including seven of at least 1,000,000 kilowatts and nine of 660,000 kilowatts.

- An increasing use of nuclear power for steam generating plants with the probability that most new generating units built after 1965 will be constructed around an atomic pile.

"We confidently expect

(Continued on Page 6, Col. 1)

2.4 Billion PGE Project

(Continued from Page 1)

that the Bodega Bay Atomic Park plant will be economically successful," Sutherland said.

He told a press conference that the company's new nuclear generating unit at Humboldt Bay has been completed and is now being loaded with atomic fuel.

Regarding the safety factor of such reactors, Sutherland said, "They are so safe you could put one in Union Square."

At present, PG&E has 14 thermal and 62 hydroelectric plants with a total capacity in excess of 6,000,000 kilowatts. The new expansion program will boost the company's thermal (steam electric) capacity alone from the present 4,000,000 kilowatts to nearly

9,000,000 kilowatts by 1970 and to almost 20,000,000 by 1980.

THREE NEW SITES

Three major new sites already are being acquired for new generating plants, Sutherland said. They are in Nipomo, below Oceano in San Luis Obispo County; South Moss Landing, a mile away from the present Moss Landing plant, and Montezuma, near Collinsville in southern Solano County.

Right-of-way work on the network of new transmission routes has also started.

Sutherland said the expansion was designed to keep up with the population growth of the state.

MEETS DEMANDS

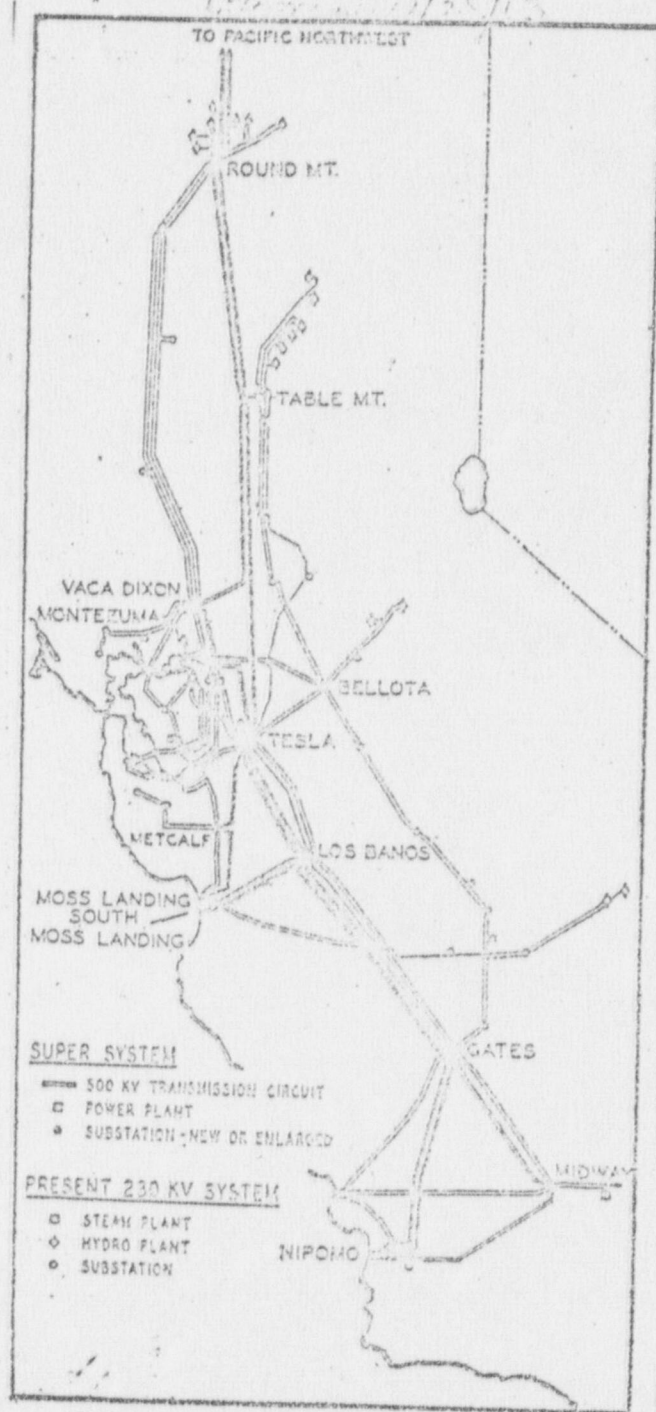
"With this program we are providing amply for future demands of our customers," he said. "Intensive study and

research, including estimates of customer needs up to 1980, convinces us that California will continue to grow as

has ever since World War II. Sutherland said the program will place early emphasis on the extra high voltage lines required to proposed interties between California and the northwest and for the flexible handling of big power blocks to come from the new large generators

The lines will also be advantageous, to the recently formed California power pool he said. The pool agreement now before the State Public Utilities Commission for approval provides for exchanges of power between PG&E, Southern California Edison, San Diego Gas and Electric Co. and the California Electric Power Co.

(Continued)



PG&E's "super system" plan—heavy double lines coming south from Pacific Northwest intertie and extending to Midway and Nipomo indicate 500,000 volt extra high voltage power transmission system.

\$2.4 Billion Expansion For PG&E

Pacific Gas and Electric Co. today unveiled an unprecedented \$2.4 billion electrical power expansion program for the next 17 years, including a super system of big generators and extra high voltage (EHV) transmission lines.

Norman R. Sutherland, company president who outlined the program, said PG&E hopes that almost half of its anticipated 26 million kilowatts of electrical power output by 1980 will be generated by thermo-nuclear processes.

The decision, he said, will depend on the success of the new Humboldt Bay nuclear plant which is scheduled for tests in a few weeks.

Sutherland, asked at a press conference about the broader use of atomic plants, said he feels that fears about them "will vanish when the full story is known about the safety factors which are built into them."

He emphasized that PG&E does not contemplate any subsidies from the Atomic Energy Commission in the development of thermo-nuclear generators.

"We have never accepted any and I feel that we never will," Sutherland said.

He noted however, that the company must rent atomic fuel from the AEC at 4% per cent interest a year.

The company's expansion program for the next 17 years includes a super system of huge generators and extra high (EHV) transmission lines.

New 660,000 kilowatt ther-

Continued Page 2, Col. 1

PG&E Announces 17-Year Expansion

Higher Voltage Lines Given First Priority

Continued from Page 1

mal generators at Pittsburg and Antioch are among the projects scheduled in the program. The Pittsburg unit is scheduled for completion in 1969 and the Antioch unit in 1973.

Two other 330,000 kilowatt units, now under construction at the Antioch power plant, are expected to be finished next year.

TRIPLE CAPACITY

The company's construction schedule through 1980, which will more than triple present PG & E capacity, is designed to keep ahead of the increasing demand for power caused by both rapid growth and the increasing electric use by each customer.

It embraces nine thermal generators of 660,000 kilowatts or larger, seven more of at least 1,000,000 kilowatts, plus 1,200 miles of EHV transmission lines of at least 500,000 volts. The largest generator on the PG&E system today is 330,000 kilowatts and the highest transmission voltage is 230,000.

The extra high voltage transmission lines include those announced last month as part of the California Power Pool's proposal to the Bonneville Power Administrator to build interties between the Northwest and California. PG&E and three other investor-owned California utilities offered to build the interties and thus, they contend, save the Federal Government from \$100 to \$245 million to market surplus Bonneville electricity in California.

LOWER RATES FOR UTILITIES IN EFFECT

The State Public Utilities Commission has approved an annual \$2.33 million rate reduction for residential and commercial users of Pacific Gas & Electric Co. electricity.

Now in effect, the cut affects all customers except those in the Vallejo and Sacramento River farm areas and in coast counties, where lower rates prevail.

The average saving for householders will be about \$1 per year, the PUC said.

WHOLLY NEW SYSTEM

Describing the plan Sutherland said:

"This will provide a wholly new, mammoth-scale generation and transmission system which will be integrated with the company's existing system."

He stressed that the schedule is flexible.

Sutherland predicted that the company will depend on atomic energy more and more as time passes.

"We confidently expect that the Redwood Bay Atomic Park plant will be economically successful and that many of the new big generating units in the construction program after 1965 will be nuclear," he said.

(Continued)

JOB

"We are proud of this further demonstration of private enterprise doing such a big job. Besides providing vital electric service for the growing needs of Northern and Central California, the immense investment involved will benefit the public by providing thousands of jobs and establishing important new sources of tax revenue for local, state and Federal Governments."

Three sites are being acquired for new generating plants, Sutherland said. These are at Montezuma, near Colinsville in southern Solano County; South Moss Landing County; Monterey County, and Nipomo, below Oceano in San Luis Obispo County.

EARLY YEARS

Construction of the extra high voltage transmission lines will be pushed ahead in the early stages of the 17-year program, Sutherland said, to handle the proposed Northwest-California interties and for flexible handling of the big power blocks to flow from the large-scale generators.

This arrangement, now before the Public Utilities Commission for approval, provides for exchanges of power between and coordinated operation of the systems of PG&E, Southern California Edison, San Diego Gas and Electric Co. and the Califor-

nia Electric Power Co.

Some parts of the generator expansion program were completed recently. These are Morro Bay No. 3, De Sable (hydroelectric), Humboldt Bay No. 3 (nuclear), Morro Bay No. 4; Geysers No. 2 (geothermal) and Stanislaus (hydro).

WORK STARTED

Now under construction or previously announced in addition to the two Antioch units, are Bodega Bay Atomic Park, Potrero No. 3, McCloud-Pit (hydro), Pit No. 6 (hydro) and Pit No. 7 (hydro).

Completion dates of the contemplated generators are:

- 1963—Moss Landing No. 6 and Belden (hydro).
- 1967—Moss Landing No. 7.
- 1969—Pittsburg No. 7.
- 1970—Nipomo No. 1.
- 1971—Potrero No. 4 and Nipomo No. 2.
- 1972—Bodega Bay No. 2.
- 1973—Contra Costa No. 8 at Antioch.
- 1974—South Moss Landing Nos. 1 and 2.
- 1975—Nipomo No. 3.
- 1976—Nipomo No. 4.
- 1977—Montezuma No. 1.
- 1978—Montezuma No. 2.
- 1979—Bodega Bay No. 3.
- 1980—South Moss Landing No. 3 and Nipomo No. 5.

Big Plants In Eastbay Planned

New huge steam generating plants, planned for Contra Costa County in the Pacific Gas and Electric Company's \$2.4 billion expansion program, are expected to cost in excess of \$130 million, the company announced today.

One, slated for the Pittsburg power station, is expected to be completed in 1969.

Another at the Antioch power station is slated to go into operation in 1973.

Norman R. Sutherland, PG&E president, said construction would be started three years earlier in each case.

Each of the generators, with a capacity of 600,000 kilowatts or more, will be twice the size of any now operated by the company.

Tesla, longtime ghost town 14 miles southeast of Livermore, will become one of the key substations in the new \$223,580,000 extra high voltage power transmission system which is part of the expansion program.

It will tie in with 500,000-volt lines coming down from the Northwest and extending into Southern California.

P G & E says that during construction a number of people will work on the Tesla substation and transmission lines, but they'll probably stay in nearby Tracy.

When the substation is completed only two or three people will be necessary to operate it.

So this will not cause Tesla to come back to life.