UNITED STATES GOVERNMENT

Memorandum

: Robert Lowenstein, Acting Director

Division of Licensing and Regulation

DATE: WU.

FROM : Duncan Clark, Director

Division of Public Information

SUBJECT: NEWS CLIPPINGS

DPI:JF

Attached for your information are news clippings concerning the proposed new Pacific Gas and Electric Company reactor at Bodega Bay, California.

Attachment

BILLE

Rose Gaffney wil not sell Bay out; seeks court stay

BOD BOD

you think about this

tom plant?"

glumi

hope the damn thing blows

One man pushed back his stool and started for the door. "Well, if Rose Gaffney has her way, the thing will never get built."

Rose Gaffney, and the Pacific Gas and Electric Company's proposed 71½ million dollar atomic sower plant at the bead of Bodega Bay, are the main topics of conversation in this small fishing village tonight.

Residents here don't like the project.

And Rose Caffney, a seventy-six year old greatgrandmother, has blocked it.

Mrs. Gaffney owns 432 acres adjoining the PG&E's property on the desciate Bodega Bay head.

The utility company needs a sixty-four acre strip of fuer land before a company needs a sixty-four acre strip of publicated atomic project.

Most, Softmey lan't sedling.

"They've been buying up this property in secret for three years," she said. "But they'll have to fight to get any of my land."

The PG&E has filled condemnation proceedings on the sixty-four acres under its power of eminent domain.

But the embattled great-grandmother is asking an injunction in the Sonoma County Superior Court to delay the suit until the utility company receives the Decessary permits from the Atomic Energy Commission, the State Public Utilities Commission, and the Army Engineers Corps.

"What FG&E steinke they can just bulldone aboad and build the plant," also said. "Well, they've got another think comming."

Rose Gaffsey is an amateur geologist, marine scientist, historian, ornithologist, lawyer, botanist, and artist, She is also a hell-raiser from a long time back and is taking on the PGS after a fifteen year battle with the Statement Sonome County over tidelands ownership.

Bodega Bay residents, led by Mrs. Caffney, have refused to pay rental on their tideland properties. State officers coded-the tidelands rights to the county fifteen years ago, but Mrs. Gaffney do 't see it their way.

--- Continued on page 8

Fighting Grandma Hints PG&E, County "Deal"

th Bay residents vis and Joan of Arc. She looks saden like hirs. Khrash

Dressed have hos faded, blue-flowered house coat, she sat in her Salmun Creek home and lembasted the County and the PGAE The walls of the plain Mying room were filled with treve holding her collection of 300. 000 indian relice; Stadus of Marine biologie books were on the floor.

"There are many other places the PG&E could build this plant," she said. "The County got them to put it on Bodega Bay so they could get at me and end the tidelands opposition.

Opensy threate

"The County has been threatening to build it road along the Bay Head and cut us off from our tidelands since they can't beat us in court. This project would

The fighting great-grand mother also opposes the will Hy company's plans on moral and scientific ground

She says Bodega Head in one of the three finest areas in the country for marine research and should be set aside for conservation pur

Freak current conditions have brought a rich sea life to the area, and account for the large salmen tonk near. bv.

Mrs. Gattney fears that the amount of heat turned into the Bay from the plant would be disastrous to scalife here.

Heating of the cold Atlantic current running by Bodega Head could affect salm. on breeding and possibly de-

Station J Architect

Architect for Station J is Ted Moulton of the Itrm of Heffren and Moulton, Architects and Engineers. Moulton is also president of the Cali-fornia Heritage Council

Mositon said that Station J is an excellent example of turn of the century industrial architecture He has retained the style and charm of the original building in his work, 1. ..

stroy the one million dollar a "era year flabing industry that shad supports the form.

We would become a glood

The PGE has stated that from now the amount of heat in the the sea. This research is secommunity of heat in the the sea. This research is sepossess from the plant weightpostial."

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california studies will refrom the State Devision of Benches
the things.

For the PG&E, it looks like
the things.

For the PG&E, it looks like
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the last sky four acres will

"Much of our food years

dega Bay Head for a marine of research station. She hopes nor delaying action in the eser food years act before the PG&E can get will some from clearance.

St Chronicle 7/16/6/
10G&E at Bodega Bay

Enter-1 think it is a prest in a some to hulld on a runic power plant at Bodega Head it a unique turismerk in Sanama county. It

Bodega Head is a unique fundmerk in Sonama county. It should be preserved for recreational purposes—ar at least not made into an eyesare of a giant reactor, power station, etc. Look at Marro Bay for example.

2. Bodega Head lies on the erintest earthquake fault in California, the San Andreas Fault After the 1906 earthquake purtions near Bodega cracked and moved up to 15 feet. In case of another earthquake of that magnitude an otomic power station of Bodega could be greatly damaged and service interrupted. The quake might cause a reactor accident which could spread radioactivity through the power station and contaminate surrounding areas.

Bodek, Hear mor a

the Worth Bay Area to be rervised by the power station.

- 4 Bodega Head is vulnerable to enem, attack in case of war.

 Already one atomic power station is being built at Eureka.
- S Bodego Bry is now a small harbor for variets and fishing boots, a resport and recreational ured trequented by bothers, fishermen, skindivers, etc. If this giant PCGE atomic reactor is built, the sea water will be used to cool the reactor. This heating of the water may change the ecology of the sea life in the surrounding boy and ocean.

RUDIN M JOHNSON

Pleas for construction at Bodega Be 000,000 stomic power plant, myest stilling with the world, were assumed here yesterder by Nor man R. Sutherland, president of the Pacific Cal

Electric Company The blant with a \$29,000 kilowatt capacity will be lo- plants, to link list rad but cated on the Sopenia County coast, 50 miles borth of San but he big break-through Francisco, and will serve the North bay region. 119 1

ENCOTE THE STATE

Construction is scheduled to begin in August next year, and the plant is to be operative by December, 1965. \$59.8 MILLION REACTOR

Sutherland hald construction costs will include \$55, 826,000 for the power station reactor, along with "associated station cos's," estimated 81 82,054 30. II

The new plant wall be

The company Sutherland construction developmen explained, now pelieves it can and experience! with operation produce electricity win 180 ing splents all neembled to petitive with electricity gen-

terat d quickly from husi erated in conventional steam

This Superland pointed

COMPETITIVE For as present among the less than a posca stepole pow er plants operating or abuilding in the United States daly PGRE's much smaller Humboldt Bay plant figures to provide electricity at a cust competitive for that area with onventionally facing plants The Humboldt Lacilly 4 scheduled to be peparates known as Boder's Bay Atomic next yest utcore edt

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t Bodega Bay A-Power Plan

(Continued from Page 1)

pacity sufficient to serve a city of 800,000.

make atomic power competitive at last, Sutberland said.

The new plant at Bodega Bay will be powered by a boiling water reactor with a ca-

Its 325,000 kilowatt top output compares with the 60,000 kilowatt capacity of the Rumboldt plant; 5,000 at Vallecitos and from 100,000 to 180,000 at plants near Chicago, New York and Detroit. .

The reactor will be built by General Electric Ca, and the uranism rented from the government at a cost of about 85,000,000 a year.

VAST CAPACITY

Transmission Thee will be County, at an estimated cost of \$2,250,00. Additionally, the Pacific Ocean. there will be a \$530,000 cost for terminal facilities at the Ignacio station.

As part of the over-all fort. Sutherland said, the first core inland from Campbell Cove, of uranium for the Bodega Bear the entrance to the bar-Bay project will cost \$5,605, 000.

The plant will be fueled by 77 tons of uranium, squive- actor will be drawn from the lent to 3,000,000 tons of coal, cove and discharged through sufficient for 31/2 years of a tunnel west to the ocean.

The Bodega Bay site is lo-comment on recent criticism cated on a 225-acre area on from a marine biologist to

No Government Subsidy For New P.G.E. Plant

Normen R. Sutherland, president of PG&E, made this sistement yesterday with the utility's announcement of plans for the biggest atomic power plant in the

world at Bodega Bay: "PG&S now has sommitted an investment of almost \$100,000,000 to atcesso power, the better to serve residents of this region in coming decades. It already has paid handsome dividends in engineering improvements that are basening economic atomic power elsewhere.

"As with all our stomic projects, we will build Bodess Bay with our own money. There will be no Government subsidy or financial contribution from any other source."

PG&E owns 160 acres, and

will be located

ATOMIC WASTE

Cooling water for the re-

der

the south end of Bodega the effect that such a disinstalled to Ignacie, in Marin Head, a narrow peninsula sep- charge snight contaminate the arating Bodega Harbor from coastai water.

The PG&E president replied that the water drawn is negotiating for the remain- from the cove does not become contaminated radioactively -- that occurs only to the steam which is created inside the reactor system, and this does not escape. Atomic waste will be destroyed or stored according to law.

- And, in any event, the reactor and containment system will be enclosed in a concrete and steel structure built be-Butherland was asked to low the ground to a depth of 100 feet, he said.

Sea water evaporators, developed by PG&E at the Morro Bay power glant, will provide the Bodegs Bay plant with the fresh water in the reactor system.

AREA CUSTOMERS

The electricity generated at the plant probably will not be dispatched as far as San Francisco, but limited to customers in the North Bay area.

Sutherland said it would be ideal if plants like the Bodega Bay Iscility could be bulit closer to serve the metropolitan area, but, he said, "the public isn't ready for it yet."

The PG&E president said the utility will add more

atomic plants to its system through the years, but he said he could not foresee an allstomic power system.

COST ESTIMATES

Sutherland said it is expected the cost to produce electricity at Bodega Bay during the three year life of the first uranium core will be 5.62 milis and 5.32 milis on the second core, per kilowatt.

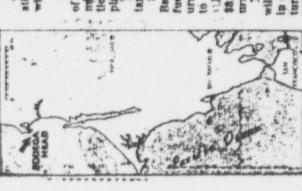
At the current price of off. the kilowatt cost of conventional generating plant operating by 1965 would be 5.77 mills, he said, and if oil went up to a price of \$3 a barrel, which is likely, it would be 6.82 mills per kilowatt.

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THE SAN FRANCISCO CHRONICLES SACT

odega Bay



ticus from the reactor will be handled in a way to prevent radioactave houseming of the ocean and the air.

The grew on of energy generated broth the first uranium core, he imimated will be 8.62 mile hat kilowatt hour, while the cross cost from the second was rul drop to 5 32 mills.

STEAM COSTS

Sutherland noted to " gross energy cost at ventional steam plant at Avdega now would cos: 5 7 mills per kilowatt hour.

"If the cost of oil goes to \$3 a harrel, which it might in the future, this energy cost would be 6.82 mills." bisa.

The electricity generated from the plant will feed directly into the company's

NO WEST OF THE PARTY OF THE PAR

Committee Thermal Jan 19, 181 pt 00000



REACTOR PLANT.—On this site (arrow) at Bodega Bay, Pacific Cas & Electric Company will build a \$61 million atomic power plant, largent in the world, it was announced yesterday. Construction will start in Aug., 1962, for the plant to begin operation in Dec., 1965. (Story, Page 1)

Bay Atom Power To Be Competitive PG& E Reactor at Bodega

Expected to Generate at Cost Below Conventional Plants

Atomic power will becom economically competitive with conventionally-produced electrical power for the first time when the Pacific Gas and Electric Company's buge \$61 million Bodega Bay underground boiling-water feactor goes into operation four years from now. The

plant, producing 325,000 kilowatts of electrical energy, will be built in a 100foot deep concrete and seel pit near the tip of Bodega Head, a sandy peninsula between Sonoma County's Bodega Bay and the Pacific Ocean.

Announcing the project at a press conference yesterday in San Francisco, PG&E President Norman Sutherland said the plant would be the world's largest atomic powered electrical generator; NEW POWER EBA

And, he conceded, some experts say it may portend the end of conventionally-fueled (oil and gas) power plants.

PG&E technicians estimate that the Bodega Bay plant, producing steam generated by enriched uranium fuel, will put out power at a cost of a trifie over 'a half-comt per kilowatt hour-or slightly less than the current cost of a similar plant using off for fuel.

(In laymen's terms, a kilowatt bour is the electrical energy required to light ten 100-watt bulbs for 60 minutes.) LOOKING AHEAD

The 225,000 kilowett capacity of the Bodega Bay plantalmost as much as that produced by the giant Sharts Dam hydroelectric plant and sufficient to supply power for a city of a half-million population-is designed to meet the demands of the growing Bay Area counties, according to Sutherland



BODEGA BAY ATOMIC PLANT Cross shows location

Theoretically, some of the power from the Bodega plant could be used in the Eastbay, but in practice virutally all will be consumed in and around Sonema County, a company spokesman said.

The plant will be built on a 225-acre site just inland from Campbell Cone on Bodega Head, about 50 miles of Sen Francisco Bay

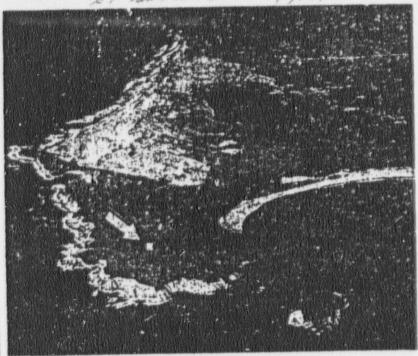
SAFETY FACTOR

The nuclear core of the bolling-water reactor will be underground to provide an additional safety factor, according to Sutherland. The plant will be highly automated, requiring only about 20 employees to operate it around the clock

Sutherland said PG&E's chief mechanical engineer. C. C. Whelebel, recently stated that with few exceptions, the 1960's would see the end of conventionally fucled power plants butherland said 'helchel's view is a matter of dispute among technical people, but implied that the sodega plant will bolster Whelchel's argument

PGE Plans Huge Bodega A-Plant

haden to take the contra



WORLD'S BEGGEST atomic-powered electrical generating plant is being planned by the PG&E for Bodega Head, futting into the Pacific on the Schooms County count. The plant, white square indicated by arrow, will be located in a small valley which separates the two hills which dora-tinate the headlands. The \$61 million project will deliver 325,000 kilowatta.

The PG&E will build the will lavest 361 million in world's biggest atomic-powered electric generating plant at Bodega Head in the Shorman County coast.

The company believes that atomic power can produce electricity cheaper (Commission).

The company believes that atomic power can produce electricity cheaper (Commission).

Utility economists estimated that the first compliant shedules for completion in 1965, will have a card of 562 mils per kilowatt hour and that subsequent should have a card over south to serve a city of cores would bring this coat in 1965, will have a card over shedules for completion in 19

WAL MYREPTHERM NEGAL ...

PLANNED ON COAST

Private Utility's Plant to Be Largest in the Country

By LAWRENCE E. DAVIES

SAN FRANCISCO, June 28-A plan to build the largest atomic plant in the country was announced today by the Pacific Gas and Electric Company, one of the author's biggest investor-ewned gas and electric concerns. Pacific's plan was in abarp contrast to the general slackes-ing of interest that electric util-ties have shown in atomic power development.

power development.

Norman R. Butherland, president of Pacific, aski that applications would be made to the Atomic Energy Commission and the California, Public Utilities Commission for parmission to be construct a 225,080 - kilswatt Plant at the property of the construct a 225,080 - kilswatt Plant at the property of plant/en Bodege Eng, fifty miles

north of this city.
He voiced confidence that the company could demonstrate at this coastal plant that atomic power would be competitive

with power generated at a con-ventional plant using oil or other fuels.

He said that this would be done despite that that "no economically competitive atemthis country at this time.

\$51,000,000 Preject

Mr. Sutherland asserted that

Mr. Sutherland asserted that the \$61,000,000 project would produce power at a cost of 5.62 mile per kilowatt hour with its first core of urankum fuel. If a conventional plant were operating at the site today, with oil at \$2.25 a barrel, the cost of be 5.77 mills, he said. Oil may oust \$3 a barrel by 1965, when the Sudega Say Atomic Park is in operation, We said. The cost of power production at a con-

is in operation, We said. The cost of power production at a conventional plant them would be 4.82 mills, he waid.

Mr. Sutherland said that the actual cost of the pisse, with its forced-circulation, directorical bolling-water reactor built by General Section Company would be about \$80,000,000. Landdition, \$2,250,000 has been allowed for transmissions lines.

Fabrication of the fact reaction will provide three and on half years of fuel, is estimated to cost \$8,405,800. Mr. Sutherland said research indicated that power research indicated that power production costs would be cut to 5.22 milis per knowatt hour on the second core.

ctart-to dame. Others that ha been talking affect master power plants have turned during on bringing first and one crote proposals.



SAM PRANCISCO

News-Call and Miletin

CHARLES H. SCHNEIDER

WELLS B. SMITH General Manager

860 Howard St., Telephone EX 7-8700

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Friday, June 30, 1961

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Cive Light and the People Will Find Their Own Way

New Atomic Power Plant

The total commitment of the Pacific Gas & Electric Co. to atomic power is \$100 million, President Norman R. Sutherland said this week in announcing the new electric generating plant at Bodega Head.

This sum has a strange look associated with a private venture. It would appear more in keeping with a requested appropriation for foreign aid.

And yet the investment is all private money; there is no subsidy and the bureaucratic hand is conspicuously absent. Management enterprise and foresight are the sparkplugs that set the project in motion.

So rapidly is a tomic science

moving that obsolescence trots at the heels of every new piece of construction. The Bodega plant will be superior to PG&E's first nuclear plant near Eureka, which is still under construction and will itself be outmoded to an extent on the day it opens.

But it is not possible to wait for the ultimate in nuclear development—if there is such a thing—or nothing would ever be built. One day the decision has to be made to proceed with the knowledge at hand.

That is what PG&E has done. The resulting Bodega plant will be the largest of its kind in the world a landmark of industrial and scientific progress.

n Drancism Exam

TRUTH, JUSTICE

CCCC* Page 14 SATURDAY, JULY 1, 1961

Time Shrinks At Bodega

THE BODEGA BAY atomic power plant, which Pacific Gas & Electric Company will build with \$61 million of its own money, offers a significant standard by which the progress in the field of nuclear energy may be measured.

Until 1945, when the first atomic bomb fell on Hiroshima, the nuclear scientist was a shadowy figure in ivied precincts. It was only then that nuclear fission had any meaning to the public.

In those 16 brief years, nuclear energy has not only been harnessed and utilized for peaceful purposes, but has become competitive. PG&E reports its Bodega Bay plant will produce power at a lower price level than could be achieved with conventional fuels, including oil. Sixteen years ago even scientists were thinking of nuclear power in this sense as being many decades away.

The fact that competitive nuclear power came sooner than expected suggests speculation in other fields, specifically the field of salt water conversion. The best informed opinion still is that many years must pass before desalination can become competitive in a cost sense with California's normal sources of fresh water. Prudence requires acceptance of that opinion. But the experience in nuclear power justifies hope that competitive desalination will come sooner than predicted-perhaps hastened by this cheap nuclear power.

In the projection of its Bodega Bay plant, PCAR.F. has given a forceful demonstration of the vitality of the free enterprise system. There are ne Government subsidies. The company has moved injaginatively into the new era of nuclear power, no longer merely tentatively and experimentally. The vision is that of an essential public service, in connectation of an earned profit.

We commend PG&E on its initiative, vision and is the It helps us all to look to the future with tore ourage and imagination.

Bodega Bay Plant

PG&E Reactor Biggest

The largest single-cycle and G.E. have worked closely including the improvement of boiling water atomic reactor together.

more flexible than earlier re- years. George White, general man- 000,000 plant, to be located pressure vessel system, the ager of General Electric's on the Sonoma County coast heat and radioactive fission partment at San Jose

G.E. will supply the re- 1962, and be completed in This "pressure suppresactor, associated nuclear 1965.

rated into Pacific Gas and a bout 175,000 pounds of tems, and development of Electric Company's new Bo uranium dioxide will be fall high-performance internal ricated into stainless steel steam separators The reactor, producing clad rods and assembled into. The reactor pressure ves-325,000 kilowatts of power 592 fuel bundles at the San sel will be enclosed in a dry will be simpler, more com- Jose plant. The average life well directly connected to a

Atomic Power Equipment De about 50 miles north of here, would be absorbed in the is expected to start in August, water pool.

plant project in which PG&E boiling water reactor designs, of nuclear p wer stations

calculation techniques and ever built will be incorpo. The initial fuel loading of criteria, development of im-

pact, more economical and of the first load will be 31/2 pool of water by a series ci actor designs, according to Construction of the \$61. of a break in the reactor pipes. In the unlikely event

sion" containment elimisteam supply equipment and. The new plant will contain nates the need for the connuclear fuel elements for the both new economical and tainment sphere or capsule plant This is the third atomic safety features over former which used to be the symbol

JUN 29 1961 1 19 1961

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MEMORANDUM FOR CHAINSAM SEADORG

COMMENS BURER CHAMPING COMMENS BURER OLSON COMMENS BURER BARDERN

EN CALEPORNIA NAME ET P & G E OF PLANE FOR NON REACTOR

Attached for your information is the tank of an association is the tank of an association in the bedanadey, June 18, by Carific Gas and Electric Geopeny concerning its plans to countriest a power reactor 30 miles meth of tan Francisco. The company made the sementeness at a press conference bold June 26 at San Francisco.

mone flere, Director
Office of Public Information

ACT-malmoust

>>> co: A. R. Lundoche, Caperal Himagor

bce: R. K. Donovan, OCL Dr. Frank K. Fittman, DRD R. Lowenstein, L&B Secretarint

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OPI

Fouchard/jh

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ARROUNCEMENT BY PACIFIC GAS AND ELECTRIC COMPANY

One of the largest stante power plants in the world will be built by Facific Gos and Electric Company at Bodogs key on the Semons County coast 50 miles morth of San Francisco.

Flame for the project to be called Bodege Bay Atomic Park, were anwowneed today by PGM President Hormon R. Setherland. He said applications
to the U. S. Atomic Energy Commission and the California Public Utilities
Consission for permission to build the plant would be made as soon as
possible.

The Bodogs Ray stoude installation will have an electric generating capacity of 325,000 kilowetts, powered by a boiling water reactor. That capacity is enough to serve a city of half a million population.

FORE estimates the station will east \$61 million and will produce electricity for elightly less than aix mills per kilowett hour. It is sobsduled for exceptation late in 1945, Mr. Sutherland said.

PG66 beliaves electricity produced at Bodogs Bay with muslear fact will be economically competitive with electricity that would be generated in a conventional steam plant (gas and oil fueled) at that location. A morth bay site was calested because PG66 will require a large generating station in that region in 1966.

We. Sutherland pointed out that no consensuity competitive stante power plant is executing in the United States, but PGGE's 60,000-kilowett Mumbeldt key medicar unit, under construction mean Euroba, California, is expected to produce electricity competitive in that eres. Enabeldt key will be completed in 1961.

(mmen)

Continuing, Mr. Buthoriand cold: 2056's Atmete Formy Bevelopment Program, began in 1951, always has bed large, economic plants as its prime objective. The atom will achieve its important role is energy production when it produces electricity to serve a large and diversified power market as economically and as reliably as available commutional facts.

We are convinced that about energy can do this at Bodega Bay, taking its place or an congenic neares of energy elongatio natural gas, oil, falling water and gasthermal atoms to serve energal and northern California.

Prid now has committed the immediant of almost 4100 million to stania power, the botter to purve preferate of this region in coming dreades. It already has paid hasdoom dividends in engineering improvements that see hastening communic atomic power everywhere.

he with all our excels projects, we will build bedon buy with our own money. These will be no government subsidy or financial contribution from any other source.

bedage bey about Purk will be built on a 225-acre cite at the south and of bedage Back, the narrow punisonia that separates bedage Backer from the Pacific Green. 1963 were 160 serve of the aire and is negotiating for purchase of the additional land.

The proposed plant is to be estimated inimal from Compbell Cove west the outroses to bedogs Burbor. Goaling vector will be drawn from Compbell Gove and discharged through a trunch regular west to the seems.

The Reduge bay Plant will be funded by approximately II tune of wreatine, equivalent to more than three militer tens of coal, which is expected to was the plant for three and one-half years. Education of

the first head of fuel, called the reactor core, will cost am additional \$8,500,000.

See-water evaporators, pionoered by PGAI at its Herro Bay Fower Plant, will provide the Bodega Flamt with fresh water for the reactor and otense system, and muxiliary wase.

If necessary licenses and permits are obtained on schedule, PGAR will start work at Bodoga Ray in August 1962. An outlasted 360 mem will be at work on the project at the peak of construction mention. PGAR will function as its own engineer and construction manager.