BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

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In the Matter of the Application of)

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HAWAIIAN ELECTRIC COMPANY, INC.

For Approval of Rate Increases And Revised Rate Schedules and Rules

DOCKET NO. 2008-0083

SECOND INTERIM DECISION AND ORDER

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SECOND INTERIM DECISION AND ORDER

By this Second Interim Decision and Order, the commission approves the request by HAWAIIAN ELECTRIC COMPANY, INC. ("HECO")¹ to increase its rates on an interim basis, as set forth in HECO's Motion for Second Interim Increase for CIP CT-1 Revenue Requirements, or in the Alternative, to Continue Accruing AFUDC for the CIP CT-1 Project ("HECO's Motion"), which was filed on November 19, 2009, and therefore approves an additional interim increase of \$12,671,000, resulting in an adjusted 2009 test year interim increase of \$73,769,000 over revenues at current effective rates.

¹The parties to this docket are HECO, the DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ("Consumer Advocate"), an <u>ex officio</u> party pursuant to Hawaii Revised Statutes ("HRS") § 269-51 and Hawaii Administrative Rules ("HAR") § 6-61-62, and the DEPARTMENT OF THE NAVY on behalf of the DEPARTMENT OF DEFENSE ("DOD") (collectively, "Parties").

Background

I.

Α.

HECO's Motion

On November 19, 2009, HECO filed its Motion requesting that the commission issue a second interim decision and order as soon as possible authorizing an additional interim increase in revenue in the amount of \$12,671,000,² which represents the revenue requirements for the Campbell Industrial Park ("CIP") Combustion Turbine Unit 1 ("CT-1") Project that were included in the settlement agreement filed on May 15, 2009 ("Settlement Agreement"), but were not included in the interim increase in revenue of \$61,098,000 authorized by the Interim Decision and Order filed on July 2, 2009, and the Order Approving HECO's Revised Schedules filed on August 3, 2009.³ In the alternative, if the commission determines that the capital costs for CIP CT-1 should not be included in rate base at this time as either "used or useful" plant in service, or as property held for future use, then HECO requests that the commission allow HECO to accrue an Allowance for Funds Used During Construction ("AFUDC") on the components of the CIP CT-1 Project that have been transferred to plant in service.

²In its requested interim relief, HECO is not requesting that any biofuel inventory for CIP CT-1 be included in the 2009 test year fuel inventory.

³In effect, HECO requests that the amount of the interim increase in revenue be increased from \$61,098,000 to \$73,769,000. <u>See HECO's Motion, Exhibit 1, at 1.</u>

HECO proposed three options to allow it to earn a return on investment in CIP CT-1 at this time:

(1) Option one - approve a second interim increase now on the basis that the unit is properly included in plant in service, and is used or useful. The amount of the second interim increase would be \$12.7 million, which includes the rate base related revenue requirements of about \$11 million, and expense related revenue requirements of about \$2 million.

(2) Option two - approve a second interim increase now on the basis that the unit is property held for future use, because an operational supply of biodiesel has not yet been obtained.

(3) Option three - allow HECO to reclassify the costs of the project included in plant in service to construction work in progress ("CWIP") and to accrue AFUDC until an operational supply of biodiesel is obtained, and to allow a second interim increase later when the operational supply of diesel is obtained.

HECO states that Option one is its preferred option, and argues that it is consistent with case law holding that (1) property that services current needs, or both current and future needs, should be included in rate base as utility plant in service; and (2) generation held for reserve, standby or emergency capacity has been deemed to be used and useful for utility purposes. Option two reaches the same result, but requires securing of an operational supply of biodiesel for the unit before it can be included in plant in service. Option three

presents complications, but would compensate HECO for the carrying cost of the investment.⁴

In its Motion and its Memorandum of Law attached to its Motion, HECO contends that CIP CT-1was installed as expeditiously as possible, in order to address the reserve capacity shortfall situation that has existed since 2006. The combustion turbine-generator was completed and placed in service (i.e., tied into the electrical grid and producing power) on August 3, 2009. The unit is now installed, is connected to the grid, is available to provide electricity to HECO's customers if needed and, thus, has resolved the reserve margin shortfall situation.

Given its obligation to serve, HECO maintains that it expended substantial funds in order to bring the CIP CT-1 Project on-line as soon as possible, and having installed CIP CT-1 in order to meet its obligation to serve, HECO should be provided with a reasonable opportunity to earn a fair return on its investment in the unit. HECO maintains that the second interim increase and an opportunity to earn on HECO's investment in CIP CT-1 are essential to assure confidence in the financial integrity of HECO and to maintain its credit.⁵

⁵<u>See</u> HECO's Motion, Memorandum of Law, at 20-24.

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<u>See HECO's Motion</u>, at 6.

в.

Consumer Advocate's Comments on the Motion

On December 1, 2009, the Consumer Advocate filed its Comments on HECO's Motion for Second Interim Increase for CIP Revenue Requirements, or in the Alternative, to Continue Accruing AFUDC for the CIP CT-1 Project ("Consumer Advocate's Comments").⁶

In its Comments, the Consumer Advocate states that it does not object to HECO's request for an additional interim increase for the CIP CT-1 Project pursuant to HECO's proposals offered as Options 1 and 2. With respect to Option 1, the Consumer Advocate states that it "recognizes the need for this unit and would support a finding that, for the purpose of energy security, reliability and sustainability for the 2009 test year that the CT-1 unit is used and useful."⁷ Further, the Consumer Advocate states that "the use of the asset in this capacity has been reasonably demonstrated by evidence provided by HECO to justify rate base inclusion and an order to this end would appear to be within the commission's jurisdictional authority."⁸

The Consumer Advocate maintains that the following evidence supports a finding that CIP CT-1 is used and useful in the 2009 test year:

(1) The recorded peak load for 2009 to-date is higher than forecast;

⁶The DOD did not file a response to HECO's Motion. ⁷Consumer Advocate's Comments, at 4. ⁸Consumer Advocate's Comments, at 4. (2) Based on the Consumer Advocate's understanding of HECO's system and the capabilities of the existing generating units, availability of CIP CT-1 may be critical to mitigate risks to the system due to the occurrence of a natural disaster or other serious disturbance;

(3) Availability of CIP CT-1 may prove to be necessary during critical and high-risk scenarios such as
(a) insufficient spinning reserve to cover the loss of any generation unit,
(b) insufficient generation to serve load, and
(c) the occurrence of an island-wide blackout; and

(4) The commission's acknowledgement that HECO will work with the commission and the Consumer Advocate if there is an interruption of the biofuel supply, an emergency, or an operational problem affecting the use of CIP CT-1.

In its Comments, the Consumer Advocate focuses on the "used or useful" standard in HRS § 269-16(b), which provides that a utility's just and reasonable rates "shall provide a fair return on the property of the utility actually used or useful for public utility purposes." According to the Consumer Advocate, Hawaii courts have "recognized the principle that [] a utility's property should provide more than an incidental benefit to the utility to be considered for inclusion in the utility's rate base."¹⁰

Alternatively, the Consumer Advocate would not object to HECO's proposed Option 2, as the commission could consider its precedent of treating certain property investments that are not presently and fully used and useful as property held for future use within rate base. According to the Consumer Advocate, property held for future use has been reflected in rate base by the commission, which allows a return on the investment, but not

^{&#}x27;Consumer Advocate's Comments, at 5.

¹⁰Consumer Advocate's Comments, at 7-9.

a return of the investment (depreciation) until that investment can later be classified as plant in service.¹¹

The Consumer Advocate, however, objects to HECO's proposed alternative relief in the form of continued AFUDC for the CT-1 investment. It asserts that such relief is inconsistent with the Settlement Agreement and would likely yield excessive future charges to HECO ratepayers while creating precedent for a new form of rate relief that has not been supported in the evidentiary record in this docket.¹²

II.

Discussion

Α.

Option One Requested in HECO's Motion

As described above, HECO requests, as its preferred of three options, that the commission issue a second interim and order authorizing HECO an additional decision interim increase in revenue in the amount of \$12,671,000, which represents the revenue requirements for the CIP CT-1 Project on the ground that it is "used or useful" plant in service. At issue, therefore, is whether the CIP CT-1 Project should be included in HECO's rate base as plant in service.

Under HRS § 269-16(b)(3), the commission may "[d]o all things that are necessary in the commission's power and jurisdiction, all of which as so ordered, regulated, fixed, and

"Consumer Advocate's Comments, at 4.

¹²Consumer Advocate's Comments, at 2, 17-20.

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changed are just and reasonable, and provide a fair return on the property of the utility actually used or useful for public utility purposes." In addition, HRS § 269-16(d) allows the commission to "render an interim decision allowing the increase in rates, fares and charges, if any, to which the commission, based on the evidentiary record before it, believes the public utility is probably entitled." Therefore, the CIP CT-1 Project may be included in rate base if it is "actually used or useful for public utility purposes" under HRS § 269-16(b), and the commission may allow an increase in rates on an interim basis if HECO is "probably entitled" under HRS § 269-16(d) to the resulting increase in revenues from including CIP CT-1 into HECO's rate base as plant in service.

HECO argues that the CIP CT-1 Project is "used or useful" because: (1) it addresses the reserve margin shortfall situation; (2) provides blackstart capability in the event of an island-wide blackout; and (3) provides biofueled peaking generation. With respect to the first attribute, HECO maintains that CIP CT-1 is connected to the grid and available to serve customers in circumstances permitted by the commission (i.e., the generating unit is actually installed and operational, although it has been run only for testing and emergency use). With respect to the second attribute, the blackstart units are in service. With respect to the third attribute, HECO acknowledges that it currently lacks an operational supply of biofuel, but states that it has "moved aggressively to rebid the contracts, to file the test fuel contract, to take the risk of purchasing

the first contract amount without prior approval (which potentially means that it would not be able to recover that amount if the test fuel contract is not approved), and to show the Commission the clear path the Company has to the second operational fuel contract."¹³

1.

Reserve Capacity Shortfall¹⁴ and Blackstart Capability

By Decision and Order No. 23457, filed on May 23, 2007, in Docket No. 05-0145, the commission approved HECO's request to commit approximately \$137,430,260 for the purchase and installation of Item Y-49000, Campbell Industrial Park Generating Station and Transmission Additions Project, i.e., the CIP CT-1 Project.15 in accordance with Paragraph 2.3.g.2 of the commission's General Order No. 7, Standards for Electric Utility Service in the State of Hawaii, ("G.O. No. 7"). Specifically,

¹³<u>See</u> HECO's Motion, at 5.

¹⁴HECO defines "reserve capacity shortfall" as "the amount of additional firm generating capacity or equivalent reductions in load from load management and energy efficiency demand-side management ('DSM') programs installations needed to restore the generating system reliability above [HECO's] guideline." It defines "reserve capacity shortfall situation" as a "situation where [HECO] does not have as much firm generation as is called for by [its] capacity planning considerations to meet the highest demand of [its] customers." HECO ST-4, at 2-3.

¹⁵The CIP CT-1 Project includes (1) the construction of a new generating facility (including the acquisition of a nominal 100 MW simple-cycle combustion turbine generator and related equipment and auxiliary facilities), (2) an approximately two-mile long 138 kV transmission line, (3) expansion of HECO's existing Barbers Point Tank Farm site, (4) substation upgrades for the AES substation, Campbell Estate Industrial Park Substation and Kahe Substation, and (5) auxiliary equipment and facilities related to the foregoing.

the commission approved HECO's proposals to construct at its facility in Campbell Industrial Park, a new 110 MW combustion turbine or "CT" that will run on 100% biofuels, and a new 138 kV transmission line "based on the undisputed urgent need for new generation by HECO, and the fact that State policy and law support HECO's commitment to use 100% biofuels in the new generating unit."¹⁶ In the decision and order, the commission stated:

Pursuant to G.O. No. 7, and after careful consideration and review of the entire record in this proceeding, the commission finds that the Project, as set forth in HECO's and the Consumer Advocate's Joint Stipulation, is reasonable and in the public interest. The commission first recognizes the dire for need additional generation due to the reserve capacity shortfall faced by HECO in recent years. In fact, as stated above, all Parties agree that additional generation is needed on HECO's system. The commission also finds that the need is immediate, and that the Project must be installed by July 2009 or as early as possible, as requested by HECO.

Based on its findings, the commission concluded that the CIP CT-1 Project, as outlined in the Joint Stipulation, was necessary and consistent with State policy and laws and was reasonable and in the public interest.¹⁸ The commission stated that HECO's request to expend an estimated \$137,430,260 for the purchase and installation of CT-1 and related transmission line project was approved, "provided that no part of the [CIP] Project may be included in HECO's rate base unless and until the Project

¹⁶Decision and Order No. 23457, at 1.

¹⁷Decision and Order No. 23457, at 42-43.

¹⁸Decision and Order No. 23457, at 48.

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is in fact installed, and is used and useful for public utility purposes."¹⁹

In the Adequacy of Supply ("AOS") reports filed since the issuance of Decision and Order No. 23457, HECO has provided updated information concerning the reserve capacity shortfall. In HECO'S 2008 AOS report, filed on January 30, 2008, HECO stated: "After the planned mid-2009 addition of the [CIP] generating unit, and in recognition of the uncertainty underlying key forecasts, HECO anticipates the potential for continued reserve capacity shortfalls in the range of 20 MW to 80 MW in 2010, up to a range of 70 MW to 130 MW in 2014."²⁰ In HECO's 2009 AOS report, filed on February 27, 2009, HECO stated:

The scenario analysis indicates that in 2010, HECO may experience anywhere from a 10 MW reserve capacity shortfall under the higher load scenario to a 50 MW reserve capacity surplus in the reference scenario. By 2014, HECO may experience anywhere from a 40 MW reserve capacity shortfall under the higher load scenario to a 20 MW reserve capacity surplus in the reference scenario.²¹

In a letter dated May 6, 2009, filed in Docket No. 05-0145, from HECO to the commission, providing an update to the cost estimate for the CIP CT-1 Project, HECO included Exhibit 2 on the continued need for CT-1, which indicated in Table 8A that, under the September 2008 peak demand forecast, if CIP CT-1 were not available, the reserve capacity shortfalls

¹⁹Decision and Order No. 23457, at 53-54, Ordering Paragraph No. 1.

²⁰HECO ST-4, at 6 (citing Letter dated and filed January 30, 2009, from HECO to the commission, at 4 (2008 AOS report)).

²¹HECO ST-4, at 6 (citing Letter dated and filed January 30, 2009, from HECO to the commission, at 18 (2009 AOS report)).

would increase significantly under all scenarios.²² In HECO ST-4, it was further indicated that the May 2009 peak demand forecast was substantially lower than the September 2008 forecast, and, as such, the reserve capacity shortfalls were significantly reduced or eliminated without CIP CT-1 in the Reference Scenario, but shortfalls would still exist under the Higher Load Scenario.

According to HECO, more recent evidence "establishes that there is still a need for the additional firm capacity provided by CIP CT-1."23 In comparing the September 2008 and May 2009 peak demand forecasts by month with actually recorded peaks by month, HECO asserts that in June, July and August 2009, (adjusted for standby the recorded peaks loads) "have significantly exceeded the monthly peak demand forecast from May 2009. In fact, in June and July 2009, the recorded peaks exceeded monthly peak demand forecast even the from September 2008, which was a higher forecast than the May 2009 forecast. Therefore, in the near term at least, it appears that the September 2008 peak demand forecast is closer to the recorded peaks."24

Here, the commission agrees with HECO and the Consumer Advocate that the CIP CT-1 Project is "used or useful" to address the reserve margin shortfall situation that has existed since 2006 and to provide blackstart capability. From the record, it is undisputed that CIP CT-1 was completed and placed in service

²²HECO ST-4, at 8-10.

²³HECO's Motion, Statement of Facts, at 30.

²⁴HECO's Motion, Statement of Facts, at 30-31.

(i.e., tied into the electrical grid and producing power) on August 3, 2009. In addition, it appears that "[a]ll subcomponents and components" of the CIP CT-1 Project were "completed and placed into service" as of December 15, 2009.²⁵

Project components that HECO deemed to be placed in service as of the date of filing of HECO's supplemental testimonies (July 20, 2009) included:

- AES Substation (P0001051) April 9, 2009
- CEIP Substation (P0001052) April 22, 2009
- CIP Land (P0001084) November 28, 2008
- Microwave Communications (P0001135) June 3, 2009
- Kalaeloa Relays (P0001137) April 1, 2009

The combustion turbine-generator was completed and placed in service on August 3, 2009. The transmission line and fiber communication components were completed on July 27, 2009, and the Kahe breakers work was completed on October 1, 2009.

For the generating station component, two subcomponent systems were not completed as of August 3, 2009, including the two blackstart generators and the water treatment system. The blackstart generators (estimated to cost approximately \$3,000,000) were completed and placed in service as of October 15, 2009.²⁶ The water treatment system (estimated to cost approximately \$6,500,000) was placed in service on December 15, 2009.²⁷

²⁶HECO's Motion, Declaration of Robert Isler, at 1.

²⁷Letter dated and filed on December 16, 2009, in Docket No. 05-0145, from HECO to the commission.

²⁵Letter dated and filed on December 16, 2009, in Docket No. 05-0145, from HECO to the commission.

2.

Biofueled Peaking Generation

Since the CT-1 unit has been installed, is connected to the grid, and is available to provide electricity to address the reserve margin shortfall situation and provide blackstart capability in the event of an island-wide blackout, the CT-1 Project is arguably "used or useful" in the 2009 test year. However, the commission, in approving the commitment of funds for CT-1, conditioned its approval on the unit being run on biofuels. HECO is still in the process, however, of obtaining biodiesel supplies for the unit. Had HECO fulfilled its obligation under the Joint Stipulation²⁸ to timely secure a biodiesel supply, CT-1 could have been operated on biodiesel in the test year.

HECO argues that the CIP CT-1 Project should be considered "used or useful" because "supplies of biofuels are available and [] the appropriate commitments to obtain them have

- 2. [HECO] will initiate a solicitation process for a biofuel provider in 2006 with the selection of a biofuel provider and completion of a contract by the end of 2007.
- This process will, among other criteria, 3. require that the winning bidder be able to commit to the company, the regulators and the public that it has reliable sources for fuel that can meet the volumes necessary to reliably operate [CT-1] when operational, which is expected to be in the summer of This requirement 2009. includes demonstrating that a vibrant, multi-sourced national and international market supply exists in such fuels.

Decision and Order No. 23457, at 31 (emphasis added).

²⁸In the Joint Stipulation approved by the commission, HECO and the Consumer Advocate agreed:

been met." HECO states that, after the commission rejected the amended Imperium contract,²⁹ HECO reissued requests for proposals for biodiesel. To acquire biodiesel for the biodiesel emissions data project, HECO issued a Request for Proposal Biodiesel Supply Contract on August 14, 2009. On October 1, 2009, HECO executed a contract with REG ("Testing Biodiesel Supply Contract"). On October 2, 2009, HECO filed an application in Docket No. 2009-0296 requesting commission approval of the Testing Biodiesel Supply Contract.

On November 6, 2009, REG began delivering the biodiesel for testing purposes. The delivery of 400,000 gallons of biodiesel was completed by November 20, 2009.³⁰ The biodiesel tuning and testing, which commenced on December 3, 2009, and concluded on December 15, 2009, "confirm[ed] that biodiesel is a viable fuel for use in CT-1."³¹

³⁰HECO's Motion, Declaration of Cecily A. Barnes, at 1; <u>see also</u> Letter dated and filed on January 5, 2010, in Docket No. 2009-0296, from HECO to the commission.

²⁹On October 18, 2007, HECO filed its application in Docket No. 2007-0346 seeking commission approval of the contract between HECO and Imperium for a biodiesel fuel supply for CIP CT-1. On January 30, 2009, HECO filed Amendment No. 1 to Biodiesel Supply Contract Between Hawaiian Electric Company, Inc. and Imperium Services, LLC and Assignment to Imperium Grays Harbor, LLC. By Decision and Order filed August 5, 2009, the commission rejected the Imperium contract, as amended. The commission stated, "in general, that the terms of the Amended Contract are substantially less favorable to HECO (and therefore its ratepayers) in price, risk, scope, and additional costs than the Original Contract due to the new point of delivery of fuel."

³¹Letter dated and filed on January 5, 2010, in Docket No. 2009-0296, from HECO to the commission. HECO submitted the emissions data to the Department of Health on December 31, 2009. Id.

To operate CIP CT-1 on biodiesel on an on-going basis, HECO issued an RFP for a two-year supply of biodiesel on August 14, 2009. The RFP requested proposals for the supply and delivery of three million to seven million gallons of biodiesel per year for a term of two years from the contract effective date subject to commission approval. On December 22, 2009, HECO filed an application in Docket No. 2009-0353 for approval of the Biodiesel Supply Contract (CIP CT-1 Operational Volume) Contract Number PIF-09-006 between HECO and REG, to supply biodiesel for use primarily in CIP CT-1 as well as other HECO generating units. In its application, HECO states that it

would like to begin biodiesel operations of CIP CT-1 under this Biodiesel Supply Contract as soon as possible but no later than fourth quarter of 2010. Based on the Biodiesel Supply Contract lead time of 16 weeks, Hawaiian Electric requests a decision and order from the Commission as soon as practicable but no later than May 31, 2009. An order for biodiesel placed by June 1, 2010, subsequent to an approval order issued by the Commission, could result in operation of CT-1 on biodiesel by the 4th quarter of 2010.³²

According to HECO,

The Company took to heart the lessons learned in the Imperium case and the current biofuels arrangements can be regarded as real and as viable. Furthermore, by taking the risk of purchasing the initial supply without Commission approval, the Company is fully demonstrating its commitment to meeting the conditions of the order authorizing CT-1. Stated otherwise, to the extent that the Commission was saying that a "used and useful CT-1" needed to be a "used and useful biofueled CT-1," the Company is making clear its compliance with the full condition that went with the approval of CT-1.

³²<u>In re HECO</u>, Docket No. 2009-0353 (Application, at 11).

³³<u>See</u> Motion at 4-5.

Here, the commission finds that since the Interim Decision and Order, HECO has made unequivocal representations and has taken decisive actions that evidence a clear commitment to obtain an operational supply of biodiesel for CIP CT-1. Importantly, HECO has made substantial progress to acquire the biodiesel required to perform the emissions testing and to acquire an operational supply of biodiesel, by expeditiously issuing requests for proposals for biodiesel supplies and entering into contracts and ordering test biodiesel at its own risk prior to obtaining commission approval.³⁴ Based on the totality of the circumstances, the commission finds that HECO is probably entitled to include CIP CT-1 in its rate base as plant in service given that the unit was connected to the grid in the test year, and is available to provide electricity to address the reserve margin shortfall situation and provide blackstart capability; and given HECO's recent efforts and commitment to expeditiously obtain a biofuel supply.

However, by allowing a second interim increase, the commission is concerned that HECO's ratepayers will effectively be paying for CT-1 without receiving the full benefit envisioned by the CT-1 Project. As noted by HECO, as a peaking unit, CT-1 "is more efficient than Waiau Units 9 and 10 ('W9 and W10'), which are also peaking units":

For example, the heat rate of CIP CT-1 at its normal top load rating of 113 MW-net is about 11,720 Btu/kWh-net. By comparison, the heat rate of W9

³⁴The commission trusts that HECO will show the same sense of urgency in its renewable energy competitive bidding requests for proposals.

at its normal top load rating of about 53 MW-net is about 13,150 Btu/kWh-net, and the heat rate of W10 at its normal top load rating of about 50 MW-net is about 12,530 Btu/kWh-net. The heat rate of CT-1 at its minimum load rating of approximately 40 MW-net is about 16,800 Btu/kWh-net. By comparison, the heat rate of W9 and W10 at their minimum load rating of approximately 6 MW-net is about 41,140 and 39,350 Btu/kWh-net, respectively.³⁵

HECO states that "CIP CT-1 (run on diesel) would be the preferred solution 25 to 50 times a year to meet spinning reserve needs to sustain Gen Con Alpha."³⁶ HECO explains:

Ideally, for Gen Con Alpha (i.e., normal conditions where reserve capacity is available), the Company will only need generation from the independent power producers and its base load and cycling units to meet spinning reserve needs. its For non-emergency conditions when Gen Con Alpha cannot be sustained with only base load and cycling units, Hawaiian Electric would also commit peaking units. This situation occurs when the base load and/or cycling units may be impaired, on scheduled maintenance or on forced outage, and/or customer demand for power is higher than usual. In such situations, the Company will need to commit its peaking units - Waiau 9 ("W9"), Waiau 10 ("W10"), its distributed generation ("DG") units and/or CIP CT-1 - to keep the system in Gen Con Alpha. The peaking unit(s) that the Company will commit will depend on the extent and expected duration of the spinning reserve deficit. This is because the units have different capacities, and different heat rate characteristics at different levels of output and therefore different economics depending on the level of need.

If the spinning reserve deficit is only a few megawatts ("MW") for a few hours, the Company will usually commit the DG units because they have the lowest heat rates at low levels of output.

If the spinning reserve deficit is on the order of 100 MW for the peak load period of the day, the choice would change. For example, if the Company were allowed

 $^{35}\text{HECO's}$ response to PUC-IR-193, filed on January 8, 2010, at 5.

³⁶HECO's supplemental response to PUC-IR-193, filed on January 13, 2010, at 2-3.

to run CIP CT-1 on diesel fuel, CIP CT-1 would be the unit of choice because it would have more favorable economics than W9 and W10 given the respective heat rates for equivalent megawatt output levels for these units. If CIP CT-1 were run on biodiesel, it may or may not be the unit of choice depending on the cost of biodiesel compared to petroleum diesel. (Because the DGs can only produce up to 30 MW, they would not be used in this situation.)

If the spinning reserve deficit is somewhere in the middle (i.e., greater than 30 MW and less than 100 MW), the results would be mixed between using W9, W10, and/or CIP CT-1 (running on diesel).

The Company estimates, that CIP CT-1 (run on diesel) would be the preferred solution 25 to 50 times a year to meet spinning reserve needs to sustain Gen Con Alpha.³⁷

Accordingly, until HECO can secure its biodiesel supply requested in Docket No. 2009-0353, the commission finds it appropriate to temporarily allow HECO to operate CT-1 as a diesel peaking unit. This will allow the unit to be utilized on more than just an emergency basis thereby benefiting the ratepayer. In doing so, the commission does not eliminate the biofueling requirement of CT-1. HECO will be allowed to include the CIP CT-1 costs (as identified in this Second Interim Decision and Order) in rate base as long as the commission is satisfied in its sole discretion that HECO is making adequate progress in securing an operational supply of biodiesel. Ratepayers should not be burdened with the costs of a facility that cannot serve its intended function due to imprudent action or inaction on the part of the utility to acquire the resources needed to make the

[&]quot;HECO's supplemental response to PUC-IR-193, filed on January 13, 2010, at 2-3.

facility fully operational.³⁸ Our decision to allow the temporary diesel-fueled use of the more efficient CT-1 in appropriate circumstances will benefit ratepayers both monetarily, by reducing fuel costs, and environmentally by reducing the amount of fossil fuel consumed.

в.

<u>Refund</u>

The commission emphasizes that the findings and adoption here of the various amounts reflected in Exhibits A and B are for the purpose of this Second Interim Decision and Order only. All of the commission's decisions and rulings in this regard are subject to a more detailed review and analysis. The commission's final decision and order will reflect this review and analysis of all estimates and proposals of the Parties. Based on the record, it appears that HECO will probably be entitled to the level of relief that the commission grants in this Second Interim Decision and Order.

HECO will be required to refund to its customers any excess collected under this Second Interim Decision and Order, together with such interest as provided for by HRS § 269-16(d), if the final increase approved by the commission is less than the total interim increase granted by this Interim Decision and Order.

³⁸As the commission is granting HECO's Motion on Option 1, it need not address Options 2 and 3.

Within thirty days of the end of each calendar quarter, HECO shall file a report detailing its progress in obtaining the permit modification, and necessary air in acquiring an operational supply of biodiesel, until these items are secured. Thus, the commission will be able to track HECO's progress in obtaining biofuel in the biofuel contract proceeding, or through reports it requires in this order. If the commission is not satisfied with the biofuel progress when the final decision.and order in this proceeding is issued, the commission reserves the right to take further action, including removing the CT-1 costs from rate base, and ordering any appropriate refunds to ratepayers.

III.

Orders

THE COMMISSION ORDERS:

1. HECO may increase its rates an additional \$12,671,000, on an interim basis, resulting in an adjusted 2009 test year interim increase of \$73,769,000 over revenues at current effective rates.

2. HECO shall promptly file copies of its revised tariff sheets to reflect the adjustments approved by this order.

3. HECO shall comply with the reporting requirement set forth in Section II.B, above.

4. Upon issuance of the final Decision and Order in this proceeding, any amount collected pursuant to this interim rate increase that is in excess of the increase determined

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by the final decision and order to be just and reasonable shall be refunded to HECO's ratepayers, together with interest, as provided by HRS § 269-16(d).

DONE at Honolulu, Hawaii _____ FEB 1 9 2010

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

By (

Carlito P. Caliboso, Chairman

0 B١ John E. Cole, Commissioner

By____ Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

Stacey Kawasaki Djou Commission Counsel

2008-0083.laa

DOCKET NO. 2008-0083 HAWAIIAN ELECTRIC COMPANY, INC. RESULTS OF OPERATIONS 2009 (\$ IN 000'S)

	CURRENT EFFECTIVE RATES	ADDITIONAL AMOUNT	INTERIM RATES
Operating Revenues:			
Electric	1,292,685	73,718	1,366,403
Other	4,140	51	4,191
Gain on Sale of Land	615	0	615
Total Operating Revenues	1,297,440		1,371,209
Operating Expenses:	4484865555658868888	866564-968888	
O&M:			
Fuel	438,348		438,348
Purchased Power	346,467		346,467
Production	77,691		77,691
Transmission	13,633		13,633
Distribution	29,420		29,420
Customer Accounts	12,358		12,358
Allowance for Uncollectible Accounts	1,302	O,	1,302
Customer Service	5,514		5,514
Administrative & General	87,286		87,286
Total O&M	1,012,019	0	1,012,019
Depreciation & Amortization	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes, Other than Income Taxes	121,945	6,553	128,498
Interest - Customer Deposits	479		479
Income Taxes	17,943	26,154	44,096
Total Operating Expenses	1,232,800	32,707	1,265,507
Net Operating Income	64,640	41,062	105,702
Average Depreciated Rate Base	======== 1,251,571	(664)	======== 1,250, 9 07
Rate of Return	========= 5.16%		<u>======</u> 8.45%
	=======		======\$

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DOCKET NO. 2008-0083 HAWAIIAN ELECTRIC COMPANY, INC. ANALYSIS OF RATE INCREASE (\$ IN 000'S)

	AMOUNT	% INCREASE
RATE INCREASE:		
ELECTRIC REVENUES OTHER REVENUES GAIN ON SALE OF LAND	73,718 51 -	5.70% 1.23% 0.00%
TOTAL INCREASE	73,769	5.69%
Less:		
Interim Rate Increase - July 2, 2009	61,098	4.71%
Total Reduction	61,098	 4.71%
2nd INTERIM INCREASE	12,671 	0.98%

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EXHIBIT A Page 2 of 4

DOCKET NO. 2008-0083 HAWAIIAN ELECTRIC COMPANY, INC. COMPUTATION OF INCOME TAX EXPENSE (\$ IN 000'S)

,		CURRENT EFFECTIVE RATES		
Income:				
Operating Revenues		1,292,685	73,718	1,366,403
Other		4,140	51	4,191
Gain on Sale of Land		615	0	615
Total Income		1,297,440	73,769	1,371,209
Deductions:				
Fuel Oil & Purchased Power		784,815		784,815
Other O&M Expenses		227,204	0	227,204
Depreciation		81,868		81,868
Amortization of State ITC		(1,453)		(1,453)
Taxes, Other than Income Tax		121,945	6,553	128,498
Interest on Customer Deposit		479		479
Total Deductions		1,214,858	6,553	1,221,411
Tax Adjustments:				
Interest Expense		(31,448)		(31,448)
Meals & Entertainment		78		` 78
Total Tax Adjustments		(31,370)	0	(31,370)
Taxable Income		51,212	67,216	118,428
Income Tax:				
Tax Rate:	38.9100%	19,927	26,154	46,080
Tax Benefits of Domestic Producito	n			
Activities Deduction		1,746		1,746
Tax Effect of Deductible Preferred		, -		
Stock Dividends		23		23
R&D Credit		215		215
			**********	6626540vours 7
Total Income Tax		17,943	26,154	44,096
		======		<u> Zzzaze</u>

DOCKET NO. 2008-0083 HAWAIIAN ELECTRIC COMPANY, INC. TAXES OTHER THAN INCOME TAXES (\$ IN 000'S)

· · · · · · · · · · · · · · · · · · ·	PCT.	CURRENT EFFECTIVE RATES	INTERIM RATES
Electric Revenues Other Revenues		1,292,685 4,140	1,366,403 4,191
Operating Revenues	_	1,296,825	1,370,594
PUBLIC SVC CO TAX	0.05885	76,242	80,583
PUC FEES	0.00500	6,478	6,846
FRANCHISE ROYALTY TAX	0.02500	32,285	34,128
		115,004	 121,557
PAYROLL TAXES		6, 9 40	6,940
		121,945 ======	128,498 ======
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EXHIBIT A Page 4 of 4

DOCKET NO. 2008-0083 HAWAIIAN ELECTRIC COMPANY, INC. AVERAGE DEPRECIATED RATE BASE (\$ IN 000'S)

<i>.</i>	BEGINNING BALANCE	YEAR BALANCE
Net Plant in Service	1,365,578	1,575,485
Additions:		
Fuel Oil Inventory	43,274	43,274
Materials & Supplies Inventories	16,391	15,972
Property Held for Future Use	2,331	2,331
Unamortized Net SFAS 109 Reg. Assets	57,753	62,718
Unamortized System Dev. Costs	4,684	7,936
RO Pipeline Reg Asset	-	6,366
ARO Reg Asset	10	12
Total Investments in Assets	1,490,021	1,714,094
Deduct:		
Unamortized CIAC	178,757	183,375
Customer Advances	947	807
Customer Deposits	8,201	8,581
Accumulated Def. Income Taxes	132,510	156,551
Unamortized ITC	30,102	28,650
Unamortized Gain on Sale	1,345	746
Pension Reg. Liability	3,051	(3,454)
OPEB Reg. Liability	777	433
· Total Deductions	355,690	375,689
Democratical Data Data	**********	
Depreciated Rate Base	1 104 001	1 000 405
Before Working Cash	1,134,331	1,338,405 =======
	ن <u>و و تا تا ت</u>	
Average		1,236,369
Add: Working Cash at Currrent Effective Rates		15,202
Average Depreciated Rate Base - Current Effective Rates		1,251,571
Less: Change in Working Cash		(664)
Average Depreciated Rate Base - Interim Rate	es	1,250,907 =======

EXHIBIT B Page 1 of 2

DOCKET NO. 2008-0083 HAWAIIAN ELECTRIC COMPANY, INC. COMPUTATION OF WORKING CASH ITEMS (\$ IN 000'S) .

	Collection Lag Days	Payment Lag Days	Net Lag Days	Net Lag Days/365
Expenses Requiring Cash:				
Fuel Oil Purchases	37	17.0	20	0.05
O&M - Labor	37	11.0	26	0.03
O&M - Non-Labor	37	33.0	4	0.01
	0,	00.0	4	× 0.01
Expenses Providing Cash:				
Revenue Taxes	37	66.0	(29)	(0.08)
Income Taxes - Curr. Eff. Rates	37	39.0	(2)	(0.01)
Income Taxes - Interim Rates	37	39.0	(2)	(0.01)
Purchased Power	37	37.0	0	(0.01)
			· ·	
	Current Effective Rates		Interim Rates	
		Working		Working
	Expense	Cash	Expense	Cash
Expenses Requiring Cash:		*** **		
Fuel Oil Purchases	431,206	23,628	431,206	23,628
O&M - Labor	96,094	6,845	96,094	6,845
O&M - Non-Labor	121,616	1,333	121,616	1,333
M b . 4 = 4 = 1				
Subtotal	648,916		648,916	
·			<u>م ب ن ن ب م م م م م م م م م م م م</u>	
Expenses Providing Cash:				
Revenue Taxes	115,004	(9,137)	333	(9,658)
Income Taxes - Curr. Eff. Rates	(6,080)	33		0
Income Taxes - Interim Rates	20,074	0	55	(110)
Purchased Power	346,467	0	949	Ŭ,
	*			

Settlement Adjustment (7,500) ----------Total 15,202 -----Change in Working Cash =======

(7,500)

14,538

(664)

EXHIBIT B Page 2 of 2 The foregoing Interim Decision and Order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

DEAN NISHINA EXECUTIVE DIRECTOR DIVISION OF CONSUMER ADVOCACY DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS P. O. Box 541 Honolulu, HI 96809

DEAN K. MATSUURA MANAGER - REGULATORY AFFAIRS HAWAIIAN ELECTRIC COMPANY, INC. P. O. Box 2750 Honolulu, HI 96840-0001

DR. KAY DAVOODI NAVFAC HQ ACQ-URASO 1322 Patterson Avenue, SE Suite 1000 Washington Navy Yard Washington, DC 20374-5065