

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
 )  
HAWAIIAN ELECTRIC COMPANY, INC., )  
HAWAII ELECTRIC LIGHT COMPANY, INC., )  
MAUI ELECTRIC COMPANY, LIMITED and )  
 )  
KAUAI ISLAND UTILITY COOPERATIVE )  
 )  
For Approval to Establish a Rule )  
to Implement a Community-Based )  
Renewable Energy Program and Tariff )  
and Other Related Matters. )  
\_\_\_\_\_ )

DOCKET NO. 2015-0389

ORDER NO. 37592

(1) DEVELOPING RECOMMENDATIONS; (2) ADDRESSING PHASE 1  
CONTRACTS; AND (3) GRANTING THE MOTION TO WITHDRAW OF  
RENEWABLE ENERGY ACTION COALITION OF HAWAII, INC.

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OF THE STATE OF HAWAII

In the Matter of the Application of )  
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HAWAIIAN ELECTRIC COMPANY, INC., ) DOCKET NO. 2015-0389  
HAWAII ELECTRIC LIGHT COMPANY, INC., )  
MAUI ELECTRIC COMPANY, LIMITED and ) ORDER NO. **37592**  
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KAUAI ISLAND UTILITY COOPERATIVE )  
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For Approval to Establish a Rule )  
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and Other Related Matters. )  
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(1) DEVELOPING RECOMMENDATIONS; (2) ADDRESSING PHASE 1  
CONTRACTS; AND (3) GRANTING THE MOTION TO WITHDRAW OF  
RENEWABLE ENERGY ACTION COALITION OF HAWAII, INC.

By this Order, the Public Utilities Commission  
("Commission"): (1) directs Hawaiian Electric to collaborate with  
the Parties and Participants<sup>1</sup> to develop recommendations for

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<sup>1</sup>The Parties and Participants to this proceeding are:  
(1) HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT  
COMPANY, INC., and MAUI ELECTRIC COMPANY, LIMITED, (collectively,  
"Hawaiian Electric"); (2) KAUAI ISLAND UTILITY COOPERATIVE;  
(3) the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF  
CONSUMER ADVOCACY, an ex officio party pursuant to Hawaii Revised  
Statutes § 269-51 and Hawaii Administrative Rules § 16-601-62(a);  
the Intervenor, pursuant to Order No. 33751, filed on June 8, 2016,  
at 100 ("Order No. 33751"); (4) the DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT, and TOURISM; and the Participants,  
pursuant to Order No. 33751, at 100: (5) RENEWABLE ENERGY ACTION  
COALITION OF HAWAII, INC. ("REACH"); (6) SUNPOWER CORPORATION;  
(7) HAWAII SOLAR ENERGY ASSOCIATION; (8) ULUPONO INITIATIVE, LLC;

improvements to the interconnection process and certain other elements of the Community Based Renewable Energy ("CBRE") program; (2) addresses CBRE Phase 1 contracts; and (3) grants REACH's motion to withdraw.<sup>2</sup>

I.

DEVELOPING RECOMMENDATIONS

A.

Introduction

The Commission appreciates the Parties' and Participants' diligent work to develop and improve the filings that support CBRE Phase 2 (collectively "Filings").<sup>3</sup>

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(9) BLUE PLANET FOUNDATION; (10) HAWAII PV COALITION; and (11) THE ALLIANCE FOR SOLAR CHOICE. By this Order, the Commission grants REACH's motion to withdraw.

<sup>2</sup>"Renewable Energy Action Coalition of Hawaii, Inc.'s Motion to Withdraw; and Certificate of Service," ("Motion to Withdraw") filed on December 1, 2020.

<sup>3</sup>The Filings are comprised of: (1) The Hawaiian Electric Companies' Community Based Renewable Energy (CBRE) - Phase 2 Tariff and Appendices, and RFPs and Model Contracts for LMI Customers, Molokai and Lanai, Books 1-14, filed on September 8, 2020; (2) The Hawaiian Electric Companies' Community Based Renewable Energy (CBRE) - Phase 2 Revised and Supplemental Documents Relating to the September 8, 2020 Filing, Books 1-3, filed on October 6, 2020; (3) The Hawaiian Electric Companies' Community Based Renewable Energy Phase 2 Tranche 1 RFPs and Model Contracts, Books 1-7, filed on October 9, 2020; and (4) The Hawaiian Electric Companies' Community Based Renewable Energy Tariff and Appendices, RFPs, and Model Contracts for Phase 2 Tranche 1, Books 1-10, filed on December 1, 2020.

The Commission sees five areas that require further consideration and improvement before Phase 2 can launch: (1) interconnection; (2) low and moderate income ("LMI") customer enrollment and verification; (3) general participation requirements; (4) grid services; and (5) the bid evaluation process.

B.

#### Interconnection

On October 26, 2020, the Commission held a status conference that addressed, among other things, the impacts of the interconnection process on Phase 1 CBRE project costs and timelines, and proposed delays in Stage 1 Renewable requests for proposals ("RFP") projects resulting from Hawaiian Electric's Interconnection Requirements Studies.<sup>4</sup> The Commission stated its concern that Hawaiian Electric's interconnection processes and policies are increasing development costs and extending project timelines.<sup>5</sup> The Commission elaborated on follow-up actions that it would take, including issuing information requests,

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<sup>4</sup>See "Commission Follow-Up to October 26, 2020, status conference - Further Commission Review of Hawaiian Electric's Interconnection Processes and Transition Plan to Retire the AES Coal Plant," ("November 13 Letter"), filed on November 13, 2020, in Docket Nos. 2015-0389, 2017-0352, and 2018-0165.

<sup>5</sup>See November 13 Letter at 1.

soliciting input from independent observers and developers, and reviewing interconnection practices in other jurisdictions.<sup>6</sup>

Since the Commission has initiated this process, it has become clearer that interconnection has caused significant delays to current CBRE Phase 1 projects and caused uncertainty for future CBRE Phase 2 projects. The Commission believes that the most prudent way to address this pressing issue is for Hawaiian Electric to work with Parties and Participants in this docket to develop recommendations for how to improve current interconnection processes for CBRE projects. Therefore, the Commission directs Hawaiian Electric to work extensively with the Parties and Participants and CBRE's Independent Observer ("IO"), over the next 60 days, to discuss how to make Hawaiian Electric's interconnection process for CBRE projects more transparent and predictable, including the costs, timelines, and engineering decisions involved.

Transparency and predictability will give CBRE developers some certainty, early in the development process, regarding how much it will cost to interconnect their projects, and how long that process will take. This can help CBRE developers make informed decisions on their bid pricing, show whether interconnection challenges could make a project unfeasible,

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<sup>6</sup>See November 13 Letter at 2.

indicate whether an alternative project location or configuration would be beneficial, and ultimately aid in securing financing and successfully bringing a project to commercial operation. Improvements will require near-term changes to the Tariff and the RFPs already filed in this docket. The Commission expects that any changes to the Tariff and the RFPs will be submitted to the Commission for review with the final RFP filings in this docket. Some improvements may require longer to develop and implement, as discussed below.

The Commission encourages the Parties and Participants to take this opportunity to consider and address any problems with the interconnection process, including those arising in CBRE Phase 1, those they foresee as problems for CBRE Phase 2, and those that have arisen outside of CBRE. The Commission expects the Parties and Participants to develop and propose innovative solutions and draw on best practices employed in other jurisdictions. Areas for exploration should include:

- (1) establishing transparent interconnection timelines;
- (2) making transparent, accurate, and verifiable interconnection cost estimates available to potential CBRE developers early in the development process;
- (3) mechanisms to measure Hawaiian Electric's performance in meeting established timelines and cost estimates;
- (4) an independent engineer to evaluate proposed interconnection costs, and who, in the event that timelines are not met,

could provide a neutral opinion as to why; (5) a process to settle disputes regarding interconnection costs and timelines; and (6) regular training for developers on Hawaiian Electric's interconnection process. These discussions must yield improvements to the interconnection process, a commitment from Hawaiian Electric to implement these improvements, and transparent methods for stakeholders and the Commission to hold Hawaiian Electric accountable for the resulting outcomes.

The Commission is aware that it is asking a great deal from the Parties and Participants in a short amount of time. The Commission therefore encourages the Parties and Participants to focus on solutions that address Phase 1 and 2 of CBRE and can be implemented quickly. The Commission also encourages the Parties and Participants to establish a "parking lot" for interconnection issues that need more time to resolve. Such issues could include more comprehensive interconnection reforms, cluster studies, a methodology for proactive upgrades in areas with forecasted high penetration of new generation, interruptible export service (e.g., active network management) with tariffs that encourage positive export behavior, and coordinating export tariffs with the advanced rate design work already underway. At a minimum, the Commission expects the Parties and Participants to identify any "parking lot" issues as a part the short-term recommendation filing.

C.

LMI Verification and Enrollment

The Commission directs Hawaiian Electric to collaborate with the Parties and Participants to make the LMI enrollment process clear and simple, make the LMI verification process significantly less burdensome, and eliminate all unnecessary verification elements. Specifically, Hawaiian Electric should further develop subscriber eligibility verification and application requirements that do not require Subscriber Organizations ("SOs") to individually verify customers' household income. Any such approach should make it easy for LMI customers to participate in CBRE and should reduce the risks and high transaction costs faced by SOs. In further developing these requirements, Hawaiian Electric must specifically propose: (1) an option of relying on geographic factors to define eligibility of LMI customers; and (2) an expanded list of indicators that will make a customer automatically eligible for CBRE LMI projects (such as eligibility for social service programs including, but not limited to Supplemental Nutrition Assistance Program (SNAP), MedQuest, Low Income Home Energy Assistance Program (LIHEAP), any State or federal housing assistance programs, and any program aimed at Asset Limited, Income Constrained, Employed (ALICE) individuals or families).



The Commission's goal is to obviate verification, if possible, and otherwise make it easy to promote maximum LMI participation. The Commission will only permit a verification requirement if it provides a benefit that significantly outweighs the burden it puts on participation.

D.

General Participation Requirements

The Commission encourages the Parties and Participants to prioritize simplicity and accessibility as they collaborate to revise general participation requirements. In so doing, Hawaiian Electric must refine the Filings and revise or remove any unnecessary or overly restrictive provisions.<sup>7</sup> This will be critical to meet CBRE's goal to expand the economic, environmental, and societal benefits of renewable energy to all Hawaii residents.<sup>8</sup> For example, the six-month enrollment requirement and terms on transfer of interest are among proposed requirements that

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<sup>7</sup>The Commission observes that the Filings number well over 16,000 pages, with significant duplication, and that some of this time collaborating would be well spent simplifying the Filings and/or developing a roadmap that helps potential developers to find key elements.

<sup>8</sup>See Act 100, Hawaii State Legislature, 2015.

require reconsideration.<sup>9</sup> The Commission expects that, with the help of the Parties and Participants, Hawaiian Electric will be able to find and remove similar unnecessarily restrictive requirements. The Commission will only permit such restrictive requirements if they provide a benefit that significantly outweighs the burden they put on simplicity and accessibility.

E.

#### Grid Services

Hawaiian Electric proposed a methodology for valuing grid services in the bid evaluation criteria in the Filings, and further explained that methodology at the October 26, 2020 status conference. The Filings provide general information about the quantity and type(s) of grid services Hawaiian Electric seeks, and provides a price for each service.<sup>10</sup> The limited information

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<sup>9</sup>See Phase 2 Tariff and Appendices, and RFPs and Model Contracts for LMI Customers, Molokai and Lanai, Book 1, filed on September 8, 2020, Exhibit 2, at 1-2, 5.

<sup>10</sup>See "The Hawaiian Electric Companies' Community Based Renewable Energy Tariff and Appendices, RFPs, and Model Contracts for Phase 2 Tranche 1, Books 1-10," filed on December 1, 2020, at Book 1, Exhibit 5, Appendix O - Grid Needs Assessment (Island of Maui); Book 2, Exhibit 6, Appendix O - Grid Needs Assessment, (Island of Hawaii); and, Book 2, Exhibit 7, Appendix O - Grid Needs Assessment, (Island of Oahu). The Appendix O for each service territory lists the need for certain grid services (energy, upward regulating reserve, downward regulating reserve, and fast frequency response) on an hourly basis, broken down by season, with an annual average. Each Appendix O also provides

in the Filings makes it difficult to discern with any specificity the quantity and type(s) of grid services Hawaiian Electric seeks at any given location. Although the Filings also reference locational value maps, it is not clear if the data in the maps identifies the quantity and type(s) of grid services needs at sufficient locational specificity to assist potential bidders in developing CBRE projects.<sup>11</sup>

The Commission is concerned that these grid service needs are underdeveloped and not sufficiently transparent, given their weight in the bid evaluation criteria. The Commission encourages the Parties and Participants to discuss how to significantly clarify the grid services requirements, with as much locational specificity as possible, before the launch of Phase 2.

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a price, which appears to be the avoided cost, for each grid service, on an hourly basis, broken down by season, with an annual average. Each Appendix O also provides definitions for two other grid services "Distribution Capacity" and "Distribution Reliability" and identifies certain circuits where these services are needed and at what time of day.

<sup>11</sup>The locational value map for Oahu is available at [https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/oahu-locational-value-map-\(lvm\)](https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/oahu-locational-value-map-(lvm)); the locational value map for Maui, Molokai, and Lanai is available at [https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/maui-county-locational-value-map-\(lvm\)](https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/maui-county-locational-value-map-(lvm)); and the locational value map for the island of Hawaii is available at [https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/maui-county-locational-value-map-\(lvm\)](https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/maui-county-locational-value-map-(lvm)).

F.

Bid Evaluation

1.

Models and Valuation

It is essential that the Phase 2 bid evaluation process is fair, transparent, and maximizes benefits to ratepayers. As proposed, the bid evaluation process relies heavily on levelized benefit as a key metric to compare self-build options and third-party proposals. The levelized benefit is calculated, in part, by the RESOLVE model to estimate the value of grid services identified in each proposal.

The Commission is concerned about Hawaiian Electric's proposed use of the RESOLVE model for the purposes of valuing grid services in the CBRE Phase 2 RFP process. Specifically, it is not clear how Hawaiian Electric plans to use RESOLVE to evaluate the benefits of CBRE Phase 2 projects, nor is it clear how Hawaiian Electric will articulate the value of the grid services such projects may provide on each island.

The Commission is more generally concerned about Hawaiian Electric's modeling efforts in other proceedings, which have used only hard coded numbers, have not allowed for sufficient modeling flexibility, and have not relied on the most appropriate assumptions and methodology to estimate the value of

grid services.<sup>12</sup> If Hawaiian Electric wishes to use RESOLVE in this docket, or any other models or methods to assess the value of grid services, Hawaiian Electric must, with the aid of the Parties and Participants, develop a document that clearly describes the models and methods employed, and transparently explains how they provide a grid services valuation. These discussions will help Hawaiian Electric develop a values assessment for grid services that has not yet been available.

Based on the Commission's concerns articulated above, if Hawaiian Electric continues planning to use the RESOLVE model in the evaluation process, it must provide significantly greater transparency regarding methods, inputs, and assumptions. This is particularly important to ensure that self-build options are compared fairly against third-party proposals, especially when quantifying the value of grid services, which are a significant portion of the evaluation criteria. In general, the Commission is concerned that relying on methods different from the methods applied with the Stage 2 RFPs, could lead to a more complicated and less transparent evaluation process.

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<sup>12</sup>See In re Public Utils. Comm'n, Docket No. 2018-0165, Order No. 36725, "Providing Guidance," filed on November 4, 2019, at 8, and Order No. 37419, "Providing Guidance," filed on November 5, 2020, at 13; see also In re Public Utils. Comm'n, Docket No. 2007-0341, Decision and Order No. 37523, filed on December 31, 2020, at 33-34.

Prior to using any model, such as the RESOLVE model, in the Phase 2 evaluation process, Hawaiian Electric must clearly articulate all assumptions and modeling timelines to the other Parties and Participants for thorough vetting. The Commission welcomes feedback on the appropriate use of possible models and methods to best determine and compare the value of grid services detailed in the proposals.

2.

Backup Queue

The Commission believes that the four-month backup application queue, which commences on the award date, is too short. Based on experience in Phase 1, the Commission suggests that this queue be extended to at least one year, and perhaps eliminated entirely. The Commission would appreciate further feedback from the Parties and Participants on the appropriate length of the backup queue.

G.

Process/Conclusion

The Commission directs Hawaiian Electric to take the next 60 days to work together with other Parties and Participants to develop recommendations for each topic described above. Given this short timeline, the Commission encourages the Parties

and Participants to engage in discussions as frequently as needed (e.g., on a bi-weekly or more frequent basis) until recommendations are filed. The Commission expects the IO to take an active role in these deliberations.

Hawaiian Electric shall file recommendations in this docket, within 60 days of the date of this Order. All other Parties and Participants will have 15 days to file comments on the recommendations, including any reservations or disagreements they may have, along with alternatives to the Companies' proposed actions.

## II.

### PHASE 1 CONTRACTS

The Commission is aware that many CBRE Phase 1 projects are experiencing delays due to Hawaiian Electric's contracting and interconnection processes. The Commission directs Hawaiian Electric to complete all contracts and agreements (i.e., the final point in Hawaiian Electric's review process) with remaining Phase 1 developers within six months from the date of this Order (i.e., by July 30, 2021). Should Hawaiian Electric fail to do so for any remaining Phase 1 project, the Commission will impose an appropriate penalty, as determined by the circumstances in each case. If any project drops out of Phase 1 during this time, the Commission will review the reasons why

(e.g., cost, timeline). If the Commission finds that a Phase 1 project has dropped out due to problems attributable to Hawaiian Electric, the Commission will take the appropriate corrective action for each instance. Any such Commission action will not be retroactive (i.e., the Commission does not intend to review Phase 1 projects that have already dropped out). The Commission will ask the IO to provide oversight during the next six months, which will help ensure that Hawaiian Electric implements the interconnection process improvements made pursuant to the process set forth in Section I., above, both for existing CBRE Phase 1 projects and new CBRE Phase 2 projects.

### III.

#### REACH'S MOTION TO WITHDRAW

REACH explains that "most of the issues that motivated REACH's participation in the Docket have been addressed in the Hawaiian Electric Companies' Draft RFPs and associated tariff and filings."<sup>13</sup> The Consumer Advocate does not object to REACH's Motion to Withdraw.

Based on the foregoing, REACH's Motion to Withdraw from this proceeding is granted. As of the date of this Order,

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<sup>13</sup>Motion to Withdraw at 2.



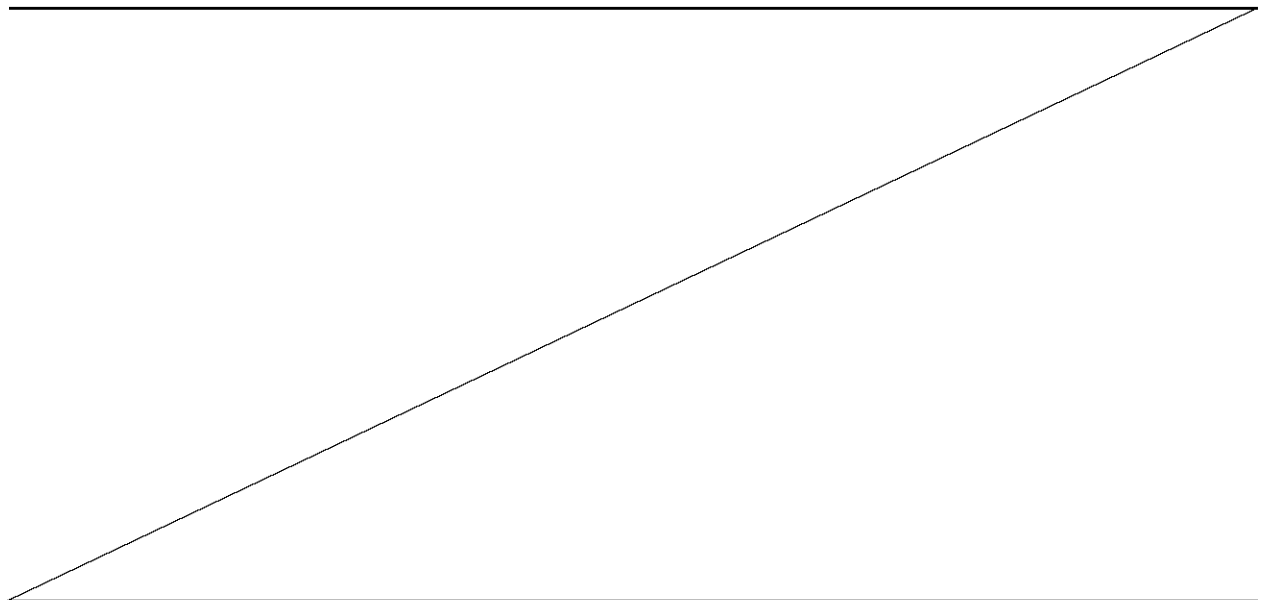
REACH is no longer a Participant in this docket, and is hereby removed from the service list.

IV.

ORDERS

THE COMMISSION ORDERS:

1. Hawaiian Electric shall collaborate with the other Parties and Participants, as set forth in this Order, and file, in this docket, recommendations and updated Filings that respond to the directives in this Order, within 60 days of the date of this Order, i.e., by March 30, 2021. The other Parties and Participants may file comments and reservations on the recommendations and updated Filings until 15 days later, i.e., by April 14, 2021 including alternatives to the Companies' proposed actions.



2. Hawaiian Electric shall complete and execute all contracts and agreements (i.e., the final point in Hawaiian Electric's review process) with Phase 1 developers within six months from the date of this Order, i.e., by July 30, 2021.


3. REACH's Motion to Withdraw is granted.

DONE at Honolulu, Hawaii JANUARY 29, 2021.

PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

By   
James P. Griffin, Chair

By   
Jennifer M. Potter, Commissioner

By   
Leodoloff R. Asuncion, Jr., Commissioner

APPROVED AS TO FORM:

  
Mike S. Wallerstein  
Commission Counsel

2015-0389.ljk

CERTIFICATE OF SERVICE

Pursuant to Order No. 37043, the foregoing Order was served on the date it was uploaded to the Public Utilities Commission's Document Management System and served through the Document Management System's electronic Distribution List.

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2021 Jan 29 PM 12:47

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COMMISSION

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