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1	TABLE OF CONTENTS
2	
3	Table of Contents
4	
5	Adoption of Agenda and Approval of Minutes and Action Guide and
6	Next Steps4
7	
8	Results of Side-by-Side Testing of Cellular Vessel Monitoring
9	Systems (cVMS) and Cellular Electronic Logbooks (cELBs) on Gulf
10	Shrimp Vessels
11	
12	Remaining Items from Summary of the October 19, 2023 Shrimp
13	Advisory Panel Meeting
14	
15	Other Business
16	
17	Adjournment
18	
19	
20	
21	

1 The Shrimp Management Committee of the Gulf of Mexico Fishery 2 Management Council convened at The Embassy Suites in Panama City 3 Beach, Florida on Monday afternoon, October 23, 2023 and was 4 called to order by Chairman Chris Schieble.

ADOPTION OF AGENDA APPROVAL OF MINUTES ACTION GUIDE AND NEXT STEPS

10 CHAIRMAN CHRIS SCHIEBLE: Good afternoon, everyone. At this 11 time, I would like to call the Shrimp Management Committee to 12 The members of the committee are myself as Chair, Mr. order. 13 Gill as Vice Chair, Dr. Banks, Mr. Broussard, Mr. Diaz, Mr. 14 Donaldson, Dr. Overton, Mr. Geeslin, General Spraggins, or Rick 15 Burris, Mr. Strelcheck, and Mr. Williamson. All committee 16 members are present today.

18 The first item on the agenda is Adoption of the Agenda, which is 19 Tab B, Number 1. Does anyone have any other business that they 20 would like to see added to the agenda? I think we need to 21 actually add the other business that is listed, correct?

23 **EXECUTIVE DIRECTOR CARRIE SIMMONS:** Thank you, Mr. Chair, and so 24 I was just wondering -- We sent a letter to Dr. Evan Howell and 25 Dr. Cisco Werner regarding the climate resilient money, and if 26 it could be used towards the ELB effort, and so I will just ask, 27 at the end of the meeting, if they could give us an update on 28 that, if they have any information.

30 CHAIRMAN SCHIEBLE: Okay. So noted. Without any other 31 additions, does anyone have any objections to that agenda 32 amended? Seeing none, the agenda is approved. The next item on the agenda is Approval of the August 2023 Meeting Minutes, which 33 34 is Tab B, Number 2. Are there any additions, deletions, or 35 corrections to those minutes from the August meeting? I don't 36 have any either, and so, seeing none, is anyone opposed to 37 adopting those minutes as written? Seeing none, the minutes are 38 adopted.

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40 Next up on the agenda is the Action Guide and Next Steps, Tab B, 41 Number 3, and I believe that Dr. Freeman is remotely on the 42 meeting with us, and I will let him guide us through that. Dr. 43 Freeman, can you hear us?

45 DR. MATT FREEMAN: Yes, sir. Thank you. For the first agenda 46 item, the committee will receive results of the NMFS cellular 47 vessel monitoring, cVMS, testing on Gulf shrimp vessels. 48 Responding to the Gulf Council's motion, the goal of this

1 project was to test several different models of cVMS units, 2 alongside the existing cellular electronic logbook devices on 3 five vessels off of Palacios, Texas for the full length of an 4 average offshore trip.

6 Originally, three models were requested to be tested, and the Southeast Fisheries Science Center expanded this to a fourth 7 8 Retrieved data has been run through the Dettloff effort unit. 9 algorithm for comparison. The committee will also hear about progress on the early adopter approach. The committee will then 10 be presented with any Shrimp Advisory Panel motions related to 11 12 the results of the NMFS pilot study. The committee should ask questions and provide feedback, both to NMFS on the pilot study 13 14 as well as to council staff on the next steps and timing for the 15 draft shrimp framework action.

17 Mr. Chair, one thing to add is the Shrimp Advisory Panel meeting 18 was held this past Thursday, and there is a note in the meeting 19 summary, but I did want to remind the Shrimp Committee that we 20 were one individual short of a quorum, and so the AP still did 21 make motions, and it was just one person short of a quorum. 22 Thank you.

CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Freeman. Moving on to Agenda Item Tab B, Number 4(b), which is the results of the side-by-side testing of cellular vessel monitoring systems, and that will be Dr. Walter. Can you hear us, Dr. Walter?

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29RESULTS OF SIDE-BY-SIDE TESTING OF CELLULAR VESSEL MONITORING30SYSTEMS (cVMS) AND CELLULAR ELECTRONIC LOGBOOKS (cELBs) ON GULF31SHRIMP VESSELS

33 DR. JOHN WALTER: Good afternoon, everyone. Sorry that I cannot 34 be there in-person, but I'll be presenting the VMS testing 35 results from the side-by-side testing, and I am presenting this 36 on behalf of a large number of people who worked together on 37 this and got the units deployed over the 4th of July holidays in 38 Palacios, and then got the units taken off, and so I want to 39 give a thanks out to a lot of the people who worked on that, from our staff, to LGL, and then to the vessel owners and 40 41 captains who allowed us to get on their boats and install these. 42

The motivation here is that we had previous monitoring done with the cELBs, the current electronic logbooks, that recorded information at ten-minute intervals, and that's the previous system we had, and that's what is used to generate fishing effort, which is critical information for managing the fishery, as well as essential information for the biological opinions

1 related to sea turtles, that we have to monitor that effort, and 2 there's also an effort cap that is for bycatch. 3 That data was originally transmitted to NOAA Fisheries by the 3G 4 5 cellular network, but then, when that network stopped transmitting, we no longer were able to get that data directly 6 7 from the devices, and so now we've got the process, in the interim, to collect the chips and have them either mailed back 8 9 in, or we've got a lot of industry participation, with boots on the ground going to vessels to get those chips. 10 11 12 We're collecting that data, in the interim, until we get a new 13 process in place, and, right now, it's still giving us effort data, albeit not as systematic and as accurate as it was before, 14 15 because some of the devices are failing, and then we're not 16 getting as many chips back as we would have when the data was 17 transmitted electronically. 18 19 The goal is to try to determine what's going to be the future, 20 and we have both a requirement to do this, a request from 21 Congress to do this, and I think a strong motivation to get a 22 more modern effort data collection process in place, and one of 23 the keys to that is that we really want the units to be able to 24 actually transmit the data to us through the cellular networks 25 and not have to physically go out to vessels. 26 27 objectives were to install new cellular VMS The devices alongside cELBs on five volunteer commercial shrimp boats and 28 29 monitor the performance at-sea during regular fishing trips and 30 then have that data be transmitted cellularly to us. In order 31 to get it before the council, we had to schedule that after the 32 Texas open, in the July-August timeframe, and we wanted the data to be recorded at the standard ten-minute intervals for the full 33 34 length of an average offshore trip, and, in some cases, we got 35 multiple trips, because we were able to do that, and then we 36 wanted to run that data through the Dettloff algorithm, which 37 calculates the number of shrimping days, shrimping effort in 38 days, and so that is really the determinate of whether they work or not, is whether they gave us similar results as to what the 39 40 existing 3G units gave us. 41 Then we compared those results in the side-by-side testing, to 42 43 evaluate the performance of the units, and this comes from a motion passed by this council to conduct a side-by-side test. 44 45 46 The methodology is that Palacios, which is the port for a large number of shrimp vessels that were getting ready to fish during 47 that Texas opener, was a convenient location for us to get on 48

1 vessels and get these units installed, and we installed multiple 2 different units on the vessels during that July timeframe, in 3 advance of the opener.

5 We tested four different VMS units, Boat Command and NEMO, which are both approved by the ASMFC lobster fishery, and then Tracker 6 7 One, which was added, because it was available, and then Zen 8 VMS, which is approved for the for-hire fisheries in the Gulf of 9 Mexico. Originally, we requested to put Nautic Alert units on However, they were not available, during this time 10 the boats. 11 period, to us, and so we replaced them with some of the other 12 units that we had been exploring, and, as the ASMFC effort 13 monitoring for the lobster fishery has opened up a number of 14 units, we added both them and Tracker One to that.

We also replaced -- If there was an old cELB, one of the 3G units, we put a new one on, to ensure that we would get reliable data from them, in case one of the older units might have failed, which, as it turns out, was a wise decision, and then you can see, on five different vessels, we got almost the full suite of different units on, except we didn't get Tracker One on Vessel 5.

As I mentioned before, we ran it through the Dettloff algorithm, 24 25 which identifies trawling versus steaming, based on vessel speed and based on the distribution of speed, and then that allows us 26 27 to then say whether the effort in a given location and time is fishing effort or steaming effort, based on the vessel speed, 28 29 and that's calculated because you have two position points, and 30 then the straight-line distance between those two position 31 points, and you can derive a speed from that.

33 The results are we found that, of the old cELBs, two of the old 34 ones failed. The new ones all worked, but it does show that, as 35 those units age, just like any electronics, they're going to 36 potentially not continue to work, and, in this case, it was good 37 that we put new units on. We had results back from all four of 38 the VMS testing, except for Vessel 5, where we didn't get the 39 Tracker One on.

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41 I do want to put a disclaimer out that many of the results here will be focused on data determined to be valid by the current 42 43 estimation of commercial shrimp effort algorithm, the Dettloff algorithm, and some gaps reflect device performance, while other 44 gaps reflect the algorithm filtering, due to vessel behavior, 45 46 such as when it's stationary for a long period of time. Also, points are filtered out if they're not in the area we're 47 48 calculating our effort for, which is offshore, and so, if

1 they're inshore, those are filtered out, and so some of the 2 results that you see are due to that filtering algorithm, and 3 then we will try to clarify those as the results are presented 4 in more detail.

6 This is one result table for one vessel, and it's quite 7 detailed. I'm not going to go through every single one of these 8 for every vessel, and I will kind of briefly touch on them and 9 note that the colors show us where we got most of the data back 10 that we would expect, because we have an expected duration of 11 the trip, and then we would want to get all of that data back.

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13 In some cases, we did not get all of the data that we expected 14 back, and, in some cases, you will see numbers over 100 percent, 15 and that means that there were data points that were in between 16 the ten-minute interval, and so there are more data points, because, in some cases, devices are programmed to put a data 17 18 point down when they cross a border, when they power-on or off, 19 or for other reasons, and so sometimes you can get data that are 20 at say seven, or five, minute intervals. That's not a problem for the algorithm, because, as I noted, it takes the speed from 21 22 the position, the two positions, and then the time between them, 23 and so it simply calculates that speed and whether it's steaming 24 or towing, regardless of whether it's seven or ten minutes. 25

26 You will see a number of situations of why issues were observed, 27 where, for instance, some of the units didn't report all the 28 data, and, in one case, for Vessel 1, one of the units required 29 a reboot, which requires a magnet that we didn't send with the 30 vessel, and so it couldn't get rebooted during the trip. There 31 were also some units that had some substantial gaps in the data 32 collection, and we're not quite sure why the Tracker One had 33 that, but you will see that, systematically, the Tracker One 34 units seemed to have a lot of gaps, which may be due to settings 35 related to whether they were within cell service. 36

Now, the units should still continue to report position, just like your phone knows its position, even if it doesn't have cell data, and it would just transmit that when it gets close enough to shore. However, there might have been something with why that didn't work, and we're going to explore that further, because we've heard that the units do well in other fisheries.

Here is a figure of the estimated fishing tows, which is the upper-dashed line, and then all of the data, both fishing and steaming, which is the lower line, for each one of the units. For Vessel 1, in gray, you see when it's in port. The green and the red are the start and stop of a fishing trip, and what you

1 want to see is that the two lines show all of their data, that, 2 when they're in port, they are not fishing, and then that there 3 aren't substantial gaps.

5 These are the same results as I showed for Vessel 1 for Vessel 6 2, and, here, there was an issue, again, with the Tracker One, 7 and some of the other units had some other power issues here, 8 but, for the most part, we got pretty good results here from 9 most of the units. The old cELB did not work on this one.

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11 Then you see the time series plot of the same data, and you see 12 the Boat Command and Tracker One had missing data, and then, in some cases, the units were turned off for the first three days, 13 14 and I believe that was a power issue, and I will just quickly 15 scroll through the remainder of these slides, which are the 16 same, and we kept the presentation nearly the same as what was 17 given to the AP last week, and so, if there's a particular 18 question that people want to go back to on one of these slides, 19 we can do that, but I will just quickly go through them. This 20 is the time series plot, and this is Vessel 4, and this is 21 another time series plot, and this is Vessel 5. 22

23 Here are maps, and we've gotten permission from the vessels to show the actual maps of the effort and space, and you can see 24 25 when they're leaving port and then when they're -- You see some 26 red in the bay, and we think that that's due to when the vessels 27 are lowering their outriggers, and then you see where the bulk 28 of the fishing is offshore, and you see that some of the units 29 had some substantial missing data. This is for Vessel 1, and 30 then Vessel 2, Vessel 3, Vessel 4, and Vessel 5.

32 This is really probably the make take-home message, and this is the total effort, in tow days, after we've run the data through 33 34 the Dettloff algorithm, and what you can see is that most of the 35 units, except for the Tracker One, has got fairly similar total 36 tow days, and, essentially, it would be giving us the same 37 effort recording as any other ones, and we see that the new 38 cELBs generally performed well, with the exception of for Vessel 39 4. The Boat Command also performed well, except for on Vessel 40 NEMO also performed well. However, it had some -- Again, on 2. 41 that Vessel 1, it required the reboot. Tracker One had the greatest challenge, and I think we're still sorting out what may 42 43 have happened there, and then Zen showed quite good results. 44

I will note that there was, in one case, where there was more effort hours recorded than any of the other ones, and this is because we actually were emailed some extra days of fishing, and that's simply because of that and not because there was anything

wrong with the unit, and it didn't have any other problem, and so what we see is, generally speaking, pretty good performance from the VMS units, and I think this sets us up well for moving into the early adopter phase.

6 The challenges we faced were with some of the power issues, and 7 I think that speaks to how we're going to need to ensure that 8 the units are installed well and that they are wired to the 9 vessel, so that they obtain power when the vessel is operating, and the data was also -- One of the other parts of this early --10 11 What will be the next phase of the early adopter, which we 12 actually tested out during this testing phase, was having the 13 data be passed directly to the Science Center.

15 This is one of the potential options we're considering in the 16 framework amendment, in terms of how the data is routed, and, in 17 this case, we've created an application programming interface to 18 allow the vendors to push the data directly to the Science 19 Several of the vendors tested pushing that data into Center. 20 the database during the at-sea testing phases in the API, and 21 some of the vendors also emailed us the data, but now all of the 22 vendors have that capacity to be able to push the data to us. 23

Then what we would like to do is further flesh out that potential during the early adopter program and then determine whether that's something that we can do at scale as the program moves operation, and the question will be is that something that the Science Center can maintain, and that the vendors can also maintain, and does it ensure the confidentiality and data integrity necessary for the system to go operational.

32 The next steps here are to embark upon the early adopter 33 program. The Gulf States Fisheries Commission is administering 34 the contract to do this, and the contract has been awarded to 35 LGL Ecological Associates, and the goal of this is for voluntary 36 adoption of cellular VMS units on vessels by vessel owners and 37 operators.

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39 They would get two years of data transmission fees paid for, as 40 well as the unit purchase and installation, and so it's a pretty 41 qood deal. This is in advance of any rulemaking, and is entirely voluntary, but it might -- It would most likely help to 42 43 support whatever rulemaking comes into place, in terms of being able to beta test these units before anything is required, and 44 so, if there are vessels who are interested in being part of 45 this, they can contact Nathan Putman at LGL Ecological Research 46 Associates, and what we would recommend is that vessel owners 47 48 choose units that demonstrated good performance here and/or that

1 are type-approved for other fisheries. 2 3 In that case, we want vessel owners to have the choice of what units to put in, and we, at NOAA Fisheries, are not dictating, 4 5 or do not right now have any requirements as to which units 6 would be supported. However, units that have shown pretty good 7 performance here would probably be preferred. 8 9 With that, I would just like to acknowledge, again, all the 10 people who have contributed to this project, and the Port of 11 Palacios, and give a thanks to the shrimp fishery. We know this 12 is a challenging time for many in the shrimp industry, and we've 13 heard that, and we want to ensure that we can get the effort 14 data modernized, in a new and improved program, with a minimal 15 and least challenges to the fishery, and we think that the early 16 adopter program is an option to help support that, and so 17 thanks, and I will take any questions. 18

One other thing that I will note is that our communications lead -- We have a new communications person, and Meaghan Emory is inperson at the meeting, and, Meaghan, if you can raise your hand, and I believe we have handouts that we can provide on this early adopter approach, if people are interested. Thanks.

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CHAIRMAN SCHIEBLE: 25 Understood. Thank you, Dr. Walter, and I appreciate, you know, your summary of this, and I know we've 26 27 gone through this testing of these different units it seems like 28 for quite a while now, and these are probably the best results, 29 at least in my opinion, that I have seen over the course of 30 going through this multiple different iterations, and so thank 31 you for your patience, and all those folks that you have listed 32 there, for putting the effort in to get this done to where we 33 can work on it. Do we have some questions around the table for 34 Dr. Walter on the test results? Kevin.

36 MR. KEVIN ANSON: Thank you, Mr. Chair. I'm not on your 37 committee, but, Dr. Walter, regarding the Boat Command unit, it 38 had the overreporting, if you will, or the additional data 39 points that were collected, but yet it's approved by the ASMFC, 40 and is that an issue that they had noted, or do they have 41 similar kind of reporting, or data issues, with that, as far as 42 extra data points?

44 **DR. WALTER:** I don't know about in ASMFC and whether that's an 45 issue, but it's certainly -- With most of the VMS units, they're 46 required to ping when they cross certain boundaries, or when 47 they have a power-on or off, or when they've lost like 48 communication, and so I think it's pretty standard to get these

pings at finer intervals, and the algorithm just simply deals 1 with it appropriately, and so it's not an issue in any way, and, 2 in fact, it's actually part of the standard programming under 3 most VMS requirements, and so, no, it's not an issue that we 4 5 could see, but I don't know about the ASMFC. Thanks. 6 7 CHAIRMAN SCHIEBLE: Thank you, Dr. Walter. Mr. Strelcheck has a 8 question. 9 10 MR. ANDY STRELCHECK: Not a question, but I quess, in response 11 to Kevin's question, I think the main issue might be the difference in the purpose of how they're using the units, and 12 13 so, in this instance, we're, obviously, trying to estimate shrimp fishing effort, and ASMFC I think is more using them as 14 15 just locational devices for where the lobster fishery is 16 operating. 17 18 CHAIRMAN SCHIEBLE: Okay. Thank you, Andy. Do we have any 19 other questions? Ms. Boggs. 20 21 MS. SUSAN BOGGS: I'm not on your committee, but I did want to 22 ask, and is there a reason that Zen doesn't transmit directly to 23 I mean, are they looking at the data prior to it the agency? 24 going to the agency, or why is that different than the others? 25 26 DR. WALTER: The reason that they emailed us was because we 27 really only created the API during the testing phase, and so Zen had been planning on emailing us the data, and only tested it 28 29 during that phase, but, operationally, how they sent it to us 30 was by email, and they can also use the API now, and so it was 31 just a timing thing, and I think, going on in the future, Zen will just be using that portal. Thanks. 32 33 34 CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Walter. Mr. Diaz. 35 36 MR. DALE DIAZ: I just wanted to kind of echo what Mr. Schieble 37 said. Dr. Walter, thank you to you and your team, the folks 38 that participated in it, and I know you all pulled this together 39 in a short amount of time, and it's a difficult thing to deal and wrestle with, and it is noted, and appreciated, and so thank 40 41 you, all. 42 43 DR. WALTER: Thank you. 44 45 CHAIRMAN SCHIEBLE: Ms. Boggs. 46 47 MS. BOGGS: Again, I'm not on your committee, but, on slide 23,

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the results from Vessel 4, I've been -- I mean, most of the maps

1 on all the vessels show pretty closely, but, on Vessel 4, the 2 Zen map, and it seems like I'm picking on Zen, but it's way 3 offtrack, compared to the other tracks, and is there any 4 explanation for that? I mean, on track compared to the other 5 hardware that were used on this vessel, and was it a different 6 trip?

8 DR. WALTER: Yes, and that one has an extra three days of 9 fishing, down there in that lower-left, and so Zen just happened 10 to be able to collect that extra data, and we probably should 11 have just removed that.

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13 **CHAIRMAN SCHIEBLE:** Okay. Do we have any other further 14 questions for Dr. Walter? If not, we can move on to the next 15 item on the agenda, which is Tab D, Number 4(a), and that's a 16 summary of the October 19, 2023 Shrimp Advisory Panel meeting, 17 and that will be from the Shrimp AP, Ms. Bosarge, please.

MS. LEANN BOSARGE: Good afternoon. Thanks for having me, and, staff, if you want to, the first part of the summary is really going to focus on that presentation that was just on the board, and so, if you want to, you can pull that back up, because I think it will be helpful as we go through this.

25 The AP first wanted to thank the council for putting forward the 26 motion that we had in our former AP summary report, where we did 27 ask for further testing on those three units, and thank you to 28 the council for making that motion as well, and sending that 29 letter on to the Science Center, and then we wanted to thank the 30 Science Center, because, really, this round of testing was very well thought out, the protocols that you put in place, and you 31 32 gave us a great baseline, and you were very proactive in making sure that you had the old 3G unit that had always been on the 33 34 boat on there, but then you also pulled your 3G units, that you 35 have the inventory at the Science Center, and put a new one on 36 there, in case the old one failed, and I think, had you not done 37 that, we wouldn't have had as great comparisons to go by, and so 38 we really appreciate you thinking through that and making sure 39 that this data was as useful as possible for us to figure out a 40 path forward.

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42 Let me step back, and so we've had two rounds of testing, right, 43 and the first round of testing -- Staff, if you want to pull 44 that old PowerPoint up that we just saw, because we're going to 45 need to refer to it, and you can go to Slide 25, if you don't 46 mind, and so, in the first round of testing, we tested three 47 type-approved VMS devices, to see if they would work for shrimp 48 data collection, because our program is a scientific data 1 collection program.

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3 It's different. Its main function is for science, and it's different than all the other VMS programs that you have, right, 4 5 and we have to take this data and make sure that the shrimp fishery is still in compliance with the Endangered Species Act, 6 7 and so this idea of the unit is offline, or it has down time, or 8 it has failures, and that's an inconvenience in а law-9 enforcement-based program, if that's the purpose for the program, and it's an issue when it's a science-based program. 10 11 We have to make sure that we're getting enough of the data to 12 get accurate results, right?

14 The first round of testing, those three units were tested, Zen, 15 NEMO, and Faria Beade. The Faria Beade failed, and I think NMFS 16 even took it off the type-approved list for all the different 17 fisheries, because it just -- It did not do well during that 18 testing. 19

20 NEMO had some issues, and it wasn't good at collecting the data 21 consistently, but there was this hypothesis that maybe that was 22 because it was not hardwired into the vessel, and it was using 23 solar power, and then the Zen did fairly well. It had one issue, where, on a longer trip, it quit collecting data, and so 24 25 we did have one failure on the Zen, but, by and large, it did well, and so we go into this second round of testing, right, and 26 27 we -- You all, and the Shrimp AP, you asked NMFS to go back and 28 test that NEMO some more, but hardwire it this time, to see how 29 it does, and you asked them to test the Zen again, because it 30 had that one failure, but it looked okay, and it looked 31 promising, and you asked them to test the Nautic Alert, which is 32 another type-approved VMS. 33

Those are the three that you asked them to test, and I have to give the Science Center kudos, because they went and did some research, and they found some other devices that are being used in other fisheries that might work for us, and they tested those too, and so they went above and beyond in that respect, and so they tested an extra two, for a total of five, the Boat Command and the Tracker One, and so those are used in other fisheries.

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42 All right, and so the NEMO. We thought it was a solar-power 43 issue. If you look at those results there, and like on Vessel 44 1, and the new and old CELB give you about thirteen days of 45 trawling, nets in the water, right, effort. Boat Command gives 46 you about the same, and Zen gives you about the same, and the NEMO gave us 3.8. The Tracker One gave us 3.3, and so, when you 47 do that math -- I mean, you don't have a 5 or 10 percent 48

1 difference in the effort being produced by these units, and you've got a 250-percent-plus difference in the effort being 2 3 produced, and so, from a fisherman's perspective, at the AP, we 4 didn't see that as success, right, and the success is that the 5 testing showed us this, thank goodness, ahead of time, and it showed us which units are still having problems, even when 6 7 hardwired, right, and so the AP did not feel like that NEMO was 8 a success. 9 10 Now, if you will go to -- I just want to point one thing out, and you all have an hour-and-a-half for this committee, and so I 11 12 wanted to go through a couple of these slides in greater detail 13 and show you what the fishermen see, and I am so excited that 14 you have an hour-and-a-half, and this is pretty much the main 15 thing on your agenda, and so, if you will let me, let's go to 16 slide 11 real quick, please, ma'am. 17 18 If you -- Here is the rest of the story, and so think about this 19 from a fisherman's perspective, and so let's focus on the NEMO 20 for a minute, and, Carrie, can you be my Vanna White? All right. On that screen back there behind you, because that's the 21 22 one that everybody can see, the NEMO, and so there's a solid-23 gray line, and then there's a dotted-gray line above it, and the solid gray line is the one that we're going to focus on, and so 24 25 any gap in the solid-gray line is where it stopped collecting 26 data, right, and so, Carrie, point to the first gap. 27 Okay, and there's gap one, and it quit working. Now go to the 28 29 second gap. There's a gap, and then the next one, and there's a 30 Then the next one, and there's a gap, and then it stops gap. 31 altogether, and so it stopped working five times on a trip, all 32 right, and that's a big deal for us as fishermen. That's a --In the AP's mind, that was an all-out failure, and we don't want 33 34 you to push this unit forward in the early adopter program. 35 36 It had issues during the first round of testing, and it's got 37 more issues now, and there's another trip where it had issues, 38 and so it had issues on two out of five trips, and that's 40 39 percent failure, from a fisherman's perspective, and the other that you have to think about, from a fisherman's 40 thing 41 perspective, is heaven forbid if NMFS makes this a VMS rule, and 42 we've got to go to the dock every time it does that, and so 43 you're talking about twelve to twenty-four hours of just steaming, of just running, and can you imagine what that fuel 44 bill looks like, to go in and fix it five times in one trip? 45 46 That's how the fishermen think about it, and I just kind of 47 wanted to back up and show you that from the fishermen's 48

1 perspective, and you can see there the Tracker One, and I'm not 2 going to spend much time on it, because pretty much all of the 3 boats that we put it on looks like that, and it just won't -- It 4 won't cut the mustard. It's not saying online, and it's not 5 collecting data when it's supposed to, and it's not reliable 6 enough for what we need for scientific data.

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8 Then, if you go to slide 13, real quick, and so, on this one, 9 see that Boat Command, and that's the green line, and it does pretty well until you get right down towards -- Right there. 10 11 See that? It quits collecting data, and we're not sure why. We 12 don't know if that's a power issue, a power supply issue, or if it really did fail, and that's the only boat that we saw this 13 14 Boat Command vendor have an issue, and so the AP said, you know, 15 maybe it could have been a power supply, and we're going to look into it more, and we feel like we want to continue testing this 16 17 Boat Command, as we go into the early adopter. You can see that 18 Tracker One has issues again.

20 The other thing that you can notice from this is like you see 21 how you have missing data at the very beginning of Zen, and the 22 Tracker One and the cELB, and you didn't have power to the units, and my guess is -- See that gray bar, and that's where 23 they're at the dock. When you're at the dock, sometimes you're 24 25 on shore power, and you can get shore power, and you have to 26 unplug the shore power, and you've got to crank the generator, 27 and these units, a lot of times, are either plugged into an UPS 28 box or a power strip, right, like a surge protector, and, when 29 you crank that generator, it trips it, and so they didn't 30 realize that it had been tripped, and those units weren't on, 31 but it tells me that it's not a problem with the units, because 32 all three of them did it at the exact time and then came on at 33 the exact same time, and so that gives you a hint that that's probably a power issue. 34

You see that as you go through these, and so the big take-away, if you want to go back to slide 25, and the big take-away, for us, is we've still go farther to go. I think this was excellent, and we learned a lot from it, and we learned what we don't want, right, and NEMO and Tracker One probably are not going to be suitable for scientific purposes, for this fishery.

Boat Command and Zen, they showed some promise. However, each one of them had one failure in each round of testing, right, and like the Zen had a failure in the very first round, and then Boat Command in this second round of testing, and so we want to look at them some more and make sure that's a fluke, right, that that happened to happen in the one-out-of-five boats, but, if

1 you had fifty boats, it still would have just been that one, and 2 we need to see that. We need to have some assurance there. 3 The other thing that I thought was worth highlighting, because 4 5 we also have this other mandate that we have to think about in the interim, until we find a replacement, and that is that the 6 7 Endangered Species Act, and the different litigation that the 8 agency has been through, says that we have to at least maintain, 9 or do better, than what we've been doing with our data collection for shrimp. 10 11 12 If you look at the new CELBs, which is still your same 3G CELB 13 that we've had on the boats for eleven years, the difference is 14 NMFS has a thousand of them in inventory, and so they took one 15 of those new ones off the shelf of their inventory and put it on 16 the boat, but it's still the 3G ELB. It does pretty well, and 17 I think we have an interim stopgap that keeps us SO in 18 compliance there. 19 20 When you combine that with the fact that the industry has put 21 boots on the ground to increase the return rate on the chips, 22 we're doing okay, and it's not real-time data, but the data that 23 you're getting is just as good, if not better, than it used to be, and so I think that's important to keep in mind. 24 25 26 Having said that, the AP passed a motion, and the motion said 27 that, at this time, based on the most recent NMFS cVMS testing, 28 the Shrimp AP requests that the Tracker One and NEMO units not 29 be included in the early adopter program. However, we left it 30 open-ended, because we don't want to shut anybody out forever, and so we added another sentence, and it said that, if improved 31 32 versions of those units are available at a later date, the Shrimp AP could consider them at that point. 33 The Shrimp AP 34 further requests that NMFS widely distribute the results of the 35 NMFS cVMS testing directly to shrimp permit holders. 36 37 This early adopter program is being funded with the \$800,000 38 that the shrimp industry went to Congress and begged for, essentially, and it was sent down to NMFS. Now, a good portion 39 of that \$800,000 was kept within NMFS to work on some things 40 41 that they want to work on, and around \$300,000, or maybe a little less, once you take off some admin fees, is going to go 42 43 to the fishermen, and my best guess at it was probably \$280,000. I couldn't get a definite answer, but the max would be \$350,000, 44 and it's probably down around \$280,000, and so that's all we 45 have to work with. 46 47 48 Don't spend that money on devices that we know aren't going to

work, please, and so that's why we passed this motion, to make that very, very clear.

The other thing that the AP talked about was -- The reason that 4 5 we structured this motion this way, and said leave those off, instead of saying, no, we want you to go forward with X, Y, and 6 7 Z is because we didn't want to eliminate any units that may come out of the woodwork that we don't know about yet that might, you 8 9 know, work well for testing, and NMFS wrote that into their protocol, when they put this contract out for bid, and so that 10 11 is written in there, that other units can come in and be 12 We don't want these two, in their current form, to considered. 13 be considered though, that NEMO and the Tracker One. 14

15 That's what we have there, and one thing that the AP didn't talk 16 about, but I just thought of just now, as I was listening to that presentation, is, as we move forward with that early 17 18 adopter program, it's really another testing phase, essentially, 19 and we're going to be getting more data in. Yes, it's great to 20 get these units paid for and on the boats, but, to me, the big 21 bang for the buck is the data you get that you can evaluate, so 22 that we can figure out what units could really be the future for 23 our industry, but we can't do that if we don't have cELB units 24 as a baseline on the boats that we're putting the early adopter 25 devices on, and so I just -- I want to plant that seed, that I hope that NMFS will think about that, to make sure that we have 26 27 data that we can really evaluate, when we get it back.

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You have like a thousand of those units on the shelf, and maybe you can send some of those to the contractor who is going to be handling this, and you're going to have to program them, and they're not programmed, but put them on the boats, along with whatever you put on for the early adopter units, so we've got a baseline to compare to.

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36 I thought about that, and then the only other question that the 37 AP had, and, really, and I'm the chairman of the AP, and I will 38 be honest that I'm not sure the answer, after going through that 39 meeting, and that page 25, the effort results, what is that a 40 Is that after you put the raw data from these units result of? through the entire Dettloff algorithm, or through a portion of 41 the Dettloff algorithm, or not through the Dettloff algorithm, 42 43 but more just an Excel-type program, where you get the speed of the boat and determine what it's doing, and that I couldn't 44 quite gather, and so hopefully we -- Because that was a big 45 piece of this, especially with the extra points. 46

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We knew, going into this, that the OLE-type VMS units, that are

1 type approved right now, they ping more than every ten minutes, because they have to. That's how their protocols are written. 2 They have to ping when they cross boundary lines, and they have 3 4 to ping every time there's a power-up or power-down, and lots of 5 different things, and we wanted to make sure that wasn't going to cause a problem with the algorithm, and so do we know --6 at they a full-blown run 7 Those numbers, of the Dettloff 8 algorithm, where you change the directory that you pull the data 9 from in your computer code, and highlighted the whole algorithm, the whole computer code, and ran it, or did you just highlight 10 11 part of it and run it, or what? 12

13 CHAIRMAN SCHIEBLE: Dr. Walter has his hand up.

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15 DR. WALTER: My understanding is that that's the full Dettloff 16 algorithm, and so it takes the data out if it's in a bay or 17 estuary, and it assigns depth based on the vessel depth data 18 file, et cetera, et cetera. 19

20 MS. BOSARGE: All right. Thanks, and maybe if we could, you 21 know, talk to Kyle Dettloff, because, yesterday, at the AP, we 22 were told that it was run with just a portion of it, and so 23 that's where the confusion is, I guess, coming from on that. 24

25 I think that's pretty much it, and I think the key take-home is that, you know, at first, I think we were really rushing into 26 27 this, with this replacement program, and I think we've slowed 28 down and backed up and started to do some really thorough 29 testing, and we're learning a lot, and I think, if we'll stay 30 kind of at the pace that we're at, and not rush into anything, 31 and let's get some more testing, and make sure this is going to 32 work, and I think we might end up with a good result here, as 33 long as we don't jump in too fast. We've got to make sure that 34 it works before we put it out there.

36 Another thing for NMFS to think about is, in your early adopter 37 program, and I think, maybe early next year, you're planning on 38 taking those old cELBs off the boat, and starting to phase them 39 out, and, I mean, based on this, it seems like it would be advantageous to leave them on there a little bit longer, 40 41 especially even just as an interim stop-gap, to make sure that 42 we've got good, solid data, until we get our for-sure 43 replacement. That's all for that. Do you want me to go through the rest of the report right now, or do you want me to pause for 44 45 a minute?

47 CHAIRMAN SCHIEBLE: Well, it looks like we have some questions 48 for you about this particular topic, and we're going to go back

1 to Dr. Freeman for the action guide, to see where we're at as far as the framework action, and I think we need to address that 2 a little bit, and then we can probably come back to you for the 3 remainder of the report, but don't run away. 4 Stick around. 5 Thank you for that summary from the AP, Ms. Bosarge, and, also, it sounds like, you know, we've got three functioning units here 6 that the AP agrees that worked fairly well in this test, versus 7 8 what we've seen in prior testing, which is a positive result, 9 and so that's fairly good, I think, considering what we've seen in the past, moving forward with this, and so would you agree 10 11 with that, that at least the AP looks at three of these units as 12 being fairly reliable?

14 Yes, and, by the three, you mean the old cELBs and MS. BOSARGE: 15 then the two potential replacement units? Yes, I think we do, and the one thing -- The only real reservation that we had, 16 17 other than the two failures that we saw that we want to make 18 sure were a fluke and not a recurring thing, and we do want to 19 see the actual -- So the Zen data, as they mentioned, was 20 emailed in, whereas, for the other units, and I guess the 21 companies have some kind of portal, right, and NMFS was able to 22 go to the portals for those companies and pull the data off the 23 portal, and so it's much more of a transmission, right, rather 24 than just an old-fashioned email in.

26 The AP had some reservations about that, and they really want to 27 see the capability of Zen to transmit this data, once you're at a full-scale program, right, with hundreds of boats, because 28 29 emailing in -- That's not going to work, right, and it's got to 30 be transmitted automatically, and so it's good that Zen was able 31 to use the API, but we hope that, going forward, any data coming 32 from the Zen is, at a minimum, at a portal level, where NMFS can 33 pull it. The best-case scenario is all the vendors are actually 34 pushing it to the API to NMFS, and so thanks.

36 **CHAIRMAN SCHIEBLE:** Okay. Thank you, Ms. Bosarge. At this 37 time, I will just go back over the motion regarding this that 38 the Shrimp AP made, keeping in mind that the Shrimp AP did not 39 have a quorum, but, since they're an advisory panel, this is 40 mostly a suggestion for the council, this motion.

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42 It states that, at this time, based on the most recent NMFS cVMS 43 testing, the Shrimp AP would request that the Tracker One and NEMO units not be included in the early adopter program. 44 Ιf improved versions of these units are available at a later date, 45 the Shrimp AP could consider them at that point. The Shrimp AP 46 further requests NMFS widely distribute the results of the NMFS 47 cVMS testing directly to federal shrimp permit holders. 48 I think

1 that second part there is something that we also need to probably discuss, maybe with Dr. Walter, going forward, and how 2 3 that distribution would take place, but, for discussion's sake, around the table with this committee, does anybody have any 4 5 questions, or statements, regarding this motion? Mr. Gill. 6 7 MR. BOB GILL: Thank you, Mr. Chairman. I think, before we get into discussion on the motion, I would like to hear, and I don't 8 9 think we've heard, the Science Center reaction to that motion, because this is all about gathering data for the science, and 10 11 they're the ultimate arbiters of that, and I would like to hear 12 what they have to say, pro or con, relative to that motion. 13 Thank you. 14 15 CHAIRMAN SCHIEBLE: Thank you, Mr. Gill. I guess, Dr. Walter, 16 did you hear that request for a response to this motion from the 17 Science Center? 18 19 DR. WALTER: Yes, I did, and I will respond, as I did at the AP, 20 it's not our preference to exclude units, and, that in particular, units that are used widely in other fisheries, and 21 22 there may very well be a simple explanation for why some of them 23 didn't work as well in the testing. 24 25 What we normally do is set the specifications for what's needed, 26 and so like set the VMS specifications, or, in the framework 27 amendments, outline the specifications, and then vendors can meet them or not, and then that would be the normal process, 28 29 rather than, right now, excluding vessels from the early 30 adopter, or excluding units from the early adopter, approach, and so our preference was not to exclude two of those, but 31 32 rather to say that that was still going to be a decision that a vessel owner could make, in consideration of these results, and 33 34 then under advisement of the contractor who will be doing the 35 work, and we'll also be coordinating between the vendors and the 36 vessel owners for installations. Thanks. 37 38 Okay. Thank you, Dr. Walter, and so your CHAIRMAN SCHIEBLE: 39 preference would be to see all five of these units included in 40 the early adopter program? 41 42 DR. WALTER: Just that it not be excluded right now, that the 43 council not pick the winners or losers right now, and I don't know that that's necessary to be done at this point. I think we 44 still are going to learn more information as we embark on the 45 early adopter approach. 46 47 48 CHAIRMAN SCHIEBLE: I quess I don't know enough about this, but

what if the industry decided to choose some of these units, and they aren't reliable, after they choose them, and how would that work?

5 DR. WALTER: Well, presumably, if they pick one, and it fails, there will be some -- There might be some warranty, in terms of, 6 7 if it's going to be purchased on a volunteer basis, and so of 8 this testing was actually provided to us at no charge, or at a 9 reduced charge, by the vendor, and SO they willingly participated in this, and that's one of the reason that I feel, 10 11 in some cases, it might be a little unfair to say that the units 12 were failures in this, when there might be an easy answer. Ιf 13 the units were purchased as part of the early adopter approach, 14 and they failed due to a warranty issue, presumably that would be between the vendor and the purchaser, and, if there was still 15 16 money available, I would imagine that the vessel owner could get 17 a different unit, as part of the early adopter program, if funds 18 were still available. Thanks.

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20 CHAIRMAN SCHIEBLE: Dr. Frazer.

22 TOM FRAZER: Thank you, Mr. Chair. DR. I'm not on the 23 committee, and I'm just trying to navigate what I heard the AP 24 say and what I'm hearing the Science Center say, right, and so 25 there are five units that were tested, and the AP is suggesting 26 that probably three of them they would like to pursue, and the 27 Science Center says, well, it may be too early to drop the other two out, but, if you're in the early adopter program, is the 28 29 decision to which unit you use -- Is it up to the fishermen to 30 make that? I don't know, and that's what I'm trying to figure 31 out.

33 **CHAIRMAN SCHIEBLE:** That's a good question. Dr. Walter, I 34 believe that decision is up to the fishermen, correct, and they 35 could pick from the choices that would be in the program?

37 DR. WALTER: That's correct, yes. The fishermen can make that 38 call.

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40 DR. FRAZER: All right. Thank you.

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42 CHAIRMAN SCHIEBLE: Mr. Diaz.

44 MR. DIAZ: I think this might be for Dr. Walter too, and so 45 Leann drove a pretty good point home when she was talking about 46 the unit that failed five times and had to make five trips back 47 to the dock, and, every time I pass a gas station, and I look up 48 and see the price of diesel, and I really don't know how shrimp

fishermen stay in business. I don't, because, I mean, you're 1 2 talking about people burning a hundred gallons a day. 3 In the early adopter program, Dr. Walter, if there is a unit 4 5 failure, is there any reason why these fishermen would have to come in? 6 7 8 DR. WALTER: No, there's no reason -- This is entirely 9 voluntary, and there be no reason that the vessel would need to come in. Thanks. 10 11 CHAIRMAN SCHIEBLE: Mr. Strelcheck. 12 13 14 MR. STRELCHECK: Well, and just an added point that, even if this was a fully-implemented program, these devices are cellular 15 16 devices, and so we wouldn't even know if it failed at-sea until 17 they came back into cell range, right, and, if they're in cell 18 range, then we would know, because it's being monitored in real-19 time. 20 21 CHAIRMAN SCHIEBLE: Dr. Porch. 22 23 DR. CLAY PORCH: I would just add that the vendors will have to meet some reporting standards, and so it wouldn't be that you 24 25 could pick any device that you want, that you think might be 26 performing, and so one of them would be that it has to report in 27 an appropriate format that we can accept in our system, or 28 whichever system is set up. 29 30 CHAIRMAN SCHIEBLE: So compatibility with the API database, 31 correct? Dr. Simmons. 32 33 EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair, and so what 34 are the current requirements for the fishery? Is that the 35 national technical specifications that we have for the cellular 36 VMS, satellite VMS, because there is no technical specs for this 37 fishery currently. 38 39 I mean, right now -- I mean, originally that was --DR. PORCH: 40 I think it was the OLE standards. Let me get back to you. 41 42 EXECUTIVE DIRECTOR SIMMONS: The reason that I ask is because, 43 when the council funded the P-Sea WindPlot study, I had many 44 vendors come to me and say what are the technical specifications for this fishery, and I think it's an important question that we 45 46 need to get to the bottom of. 47 48 CHAIRMAN SCHIEBLE: Mr. Strelcheck.

2 MR. STRELCHECK: I think we're going to have to come back to 3 this, and have some internal conversations between now and Full Council, and so my understanding is the money was left to the 4 5 Gulf States, and LGL is now a subcontractor for this, and, you know, we, as the government, can't sole-source, or we can, but 6 7 we have to justify sole-sourcing, and I don't know if the 8 agreement with LGL, or Gulf States, stipulates kind of requirements, or standards, that the units have to meet, right, 9 and so I think that's a key consideration here. 10

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12 What I am concerned about, and I think what the industry is concerned about, is we don't want to put a bunch of units out on 13 14 vessels that aren't going to work, or that don't meet our needs, and that's going to erode trust and confidence in the program, 15 and I also don't want to push out a lot of units, during the 16 17 early adopter program, that may not be approved then later by 18 this council, right, and so making sure that, legally, we can do 19 all of this with the contracting regulations I think is a big 20 question for me, and so we need to get back to you, I think, during Full Council on that. 21

23 CHAIRMAN SCHIEBLE: Okay. Thank you, Mr. Strelcheck. Do we 24 have any further questions? Dr. Frazer. 25

Again, just following-up, because I'm trying to 26 DR. FRAZER: 27 figure out what's going to happen here at Full Council, and listening to what Andy just said, and so, if you move into the 28 29 second phase of this program, and there are five units out 30 there, and so I just want to -- I am trying to navigate the 31 expectations of the industry and the science, right, so that --32 I mean, NMFS will phase the program, and what the industry saw was concern, right, and they wanted to limit the number 33 of 34 units, but if the second phase is just an extension, or 35 expansion, of the science, and the industry is not going to be 36 held accountable, right, for failures and things like that, it 37 seems to me like, if you're going to have X number of units, and 38 let's say there's 500, we want to have a hundred of each of 39 those units.

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I am feeling like there's going to be two sets of expectations, the industry saying I only want things that work, and the science guys are saying I'm not sure that we know which one is the best one, or what's going to work yet, and so we want to just have the full complement of things, and so do you hear what I'm saying, Andy? I just want to make sure that everybody is in agreement by the time we have this discussion at Full Council.

1 CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Frazer. Do we have 2 any other comments? Dr. Simmons.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair, and so I 4 5 guess, that being said, is it possible, for the second phase, the early adopter, to come back with more results to refine this 6 7 a little bit better, because it seems to me -- I think we heard, 8 at the AP meeting, only like fifty, to maybe a hundred, units might be able to be distributed, with the funding that's 9 available, and so I think there's a lot of concern about those 10 11 not working, and not getting approved later on, and then I feel 12 like the money is wasted, and so is it possible to get more 13 results before this is narrowed down through this program, 14 adopter program?

16 CHAIRMAN SCHIEBLE: That may be for Dr. Walter, and I see that 17 you have your hand up. 18

19 WALTER: Yes, Chair. The early adopter program will DR. 20 certainly give us more results, and we're expecting to get a lot 21 more data out of it, and so that's going to tell us a number of 22 things, and one is it will be in more places, and hopefully more 23 Two, we'll be able to address a couple of the issues vessels. 24 that we saw even with some of the top-performing units, such as 25 the power supply.

27 of -- You had asked about whether there In terms are specifications, and I think the framework amendment has -- While 28 29 it's still in draft form, it has a set of specifications that 30 probably could be considered as quidelines for units. Since we 31 won't have the rulemaking in place, and we need to embark upon 32 the early adopter program, we won't have specifications for that fishery in place, but I think the guidelines are pretty clear, 33 34 and they probably wouldn't change too much once that was 35 actually formalized, and so maybe that's the information to pass 36 to the contractor, in terms of these are the general guidelines 37 for data transmission, integrity of the units, service, and 38 ability for support, et cetera, that's already in the existing 39 framework draft. Thanks.

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41 CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Walter. I think it 42 sounds, to me, like, in this committee, it may be best to look 43 at possibly holding off, at least on the first part of this suggested motion from the Shrimp AP, as far as exclusion or 44 45 retention of the different units for the early adopter program, but, Dr. Walter, can you explain to me -- The second part of 46 their motion is to widely distribute results of this testing to 47 the permit holders, and is there a mechanism that's easy for 48

1 that to be done?

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3 **DR. WALTER:** We have a set of materials that are going to be 4 going out, through a Fishery Bulletin, and then a web story, and 5 I think the request, from the AP, was to provide a concise 6 illustration of these results as part of that material.

8 Since the AP was just last week, we haven't drafted that, but 9 we're going to try to work on that, but I think it's going to take a little bit of time, and I want to at least get the 10 11 announcement for the early adopter approach out as soon as 12 possible, but you will have to bear with our communications team 13 on how fast we can get this concise version of the results out 14 to people, but, yes, we agree that it's important for the 15 fishermen to know about this and then be able to make an 16 informed decision. Thanks.

18 **CHAIRMAN SCHIEBLE:** Thank you, Dr. Walter. I agree with you, 19 and I think getting the results out, so that folks know before 20 the early adopter program, and they can make their own choices 21 then, and so would you need a motion from the council for this, 22 or is this something that's going to take place regardless? 23

24 DR. WALTER: This will take place regardless, and we're going to 25 proceed with this. The motion could sort of direct people in 26 one direction or another, but I don't know that it's necessary 27 for us to embark upon this, the early adopter approach, and to 28 start getting the units on vessels. Thanks.

30 CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Walter. If there's no 31 further questions regarding this specifically, or comments, I 32 think I'm going to kick it back to Dr. Freeman to at least 33 advise us, as a council, on the next steps and timing for the 34 shrimp framework action. Dr. Freeman.

36 DR. FREEMAN: Yes, sir. Thank you, and so just a reminder for 37 the committee that there was a motion, at the April meeting, 38 asking that the draft shrimp framework action not be brought 39 back to the council until NMFS had completed this side-by-side 40 testing.

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The council also passed a motion revising Alternatives 2 and 3 in the document, and so I will note that the IPT needs to review those, and will likely do so after this council meeting, and so, as far as direction, if the committee, as well as Full Council, would like the IPT to explore the continued development of the draft framework action, beyond Chapters 1 and 2, we would need direction on that, or, if there are additional results, such as

1 the discussion about those from like the early adopter program, if folks would like for us to wait until that, any direction, 2 like I said, in terms of development of the current draft 3 framework action would be helpful for staff. 4 5 6 CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Freeman. Do we have 7 any comments regarding that within the committee? Mr. 8 Strelcheck. 9 10 MR. STRELCHECK: I still see, obviously, a lot of work ahead, in 11 terms of the testing and the early adopter program, and that's 12 going to continue to inform us as we go forward, and those will be important results that the center and others can bring back 13 14 to us. 15 16 I think, given where we're at though, it would be good to dust 17 off the amendment and start working on it again, as that 18 information develops and becomes available in 2024, and so I 19 would recommend that we bring this back in January and begin 20 discussions again on the amendment. 21 22 CHAIRMAN SCHIEBLE: Okay. Thank you. I agree with you, and I think, you know, bringing it back, sooner than later, at least 23 for the committee to look at and go through and see how each of 24 25 those alternatives will mesh with the new systems that we've 26 tested, versus what we had when the document was first drafted, 27 will be beneficial. 28 29 Also, a timeline, and I don't know if Dr. Simmons can better 30 answer this maybe, but does that mesh with the early adopter 31 program, to be able to bring it back in January, if that's being 32 implemented at the same time? It doesn't matter? 33 34 EXECUTIVE DIRECTOR SIMMONS: I don't know, and I can't recall 35 what the timeline is on the early adopter program. Sorry. 36 37 CHAIRMAN SCHIEBLE: Thank you. Okay. Well, there we go. Ι 38 quess, if there's no other comments on that, I will go back to 39 Dr. Freeman for the action guide and next steps. 40 41 DR. FREEMAN: Yes, sir. For the next agenda item, the committee 42 will be presented with any remaining AP recommendations that 43 were not covered under other agenda items and determine if they wish to take any action on the AP's recommendations. 44 45 46 CHAIRMAN SCHIEBLE: Ms. Bosarge, could you please give us the 47 remaining items from the Shrimp AP meeting? 48

REMAINING ITEMS FROM SUMMARY OF THE OCTOBER 19, 2023 SHRIMP ADVISORY PANEL MEETING

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5 MS. BOSARGE: Yes, sir. I will do my best, because we did cover 6 some other things that the AP felt were very important, and I 7 just wanted to thank Andy for his comments. I appreciate that, that you are thinking about the industry, and that trust 8 9 element, and the buy-in, and making sure that we don't put things on the boat that are probably not going to work. 10 We've 11 got enough headwinds going against us right now, and I 12 appreciate that.

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14 As far your tech specs, the ones that Dr. Walter referred to, 15 that are the ones that I wrote, that he was talking about that might could be used for vendors that are in your document, I 16 17 just will note that there is a requirement in there that those 18 devices must attain and record at least 95 percent of the 19 required ten-minute interval position fix data in a twenty-four 20 period for each twenty-four-hour day of at-sea testing, and your NEMO and your Tracker One didn't meet that requirement, and so 21 22 just -- I put it in there for a reason, because we didn't want 23 to use things that don't work, and so just, I don't know, brush up, and see if you like it, see if you can find enough warm 24 25 fuzzy, Andy, to not exclude something, but exclude something, and so all right, and let's move on with the committee report. 26 27

Discussing a Collaborative Path Forward to Understanding the Inshore Shrimp Effort to Inform Sea Turtle Restoration Efforts in the Gulf of Mexico, I think I can sum that up that the AP was generally not supportive of participating in this project.

33 The Update from BOEM on the Gulf Wind Energy, the two things 34 that I think are important, and there is a motion there, and the 35 AP was a little worried that, with the new proposed critical 36 habitat for Rice's whale and the green sea turtle and the 37 corals, lots of different things that are coming out on critical 38 habitat, that, because those aren't actually in place yet, and 39 they're just proposed rules, we wanted to make sure that NMFS is 40 still going to have to have some consultation, moving forward, 41 and we're thinking about that prior to any wind development 42 actually occurring, because what we see, from the shrimp 43 industry's perspective, as far as mammals and things like that, and interactions with endangered species, is, when the oil 44 45 industry screws it up and kills some of them, we end up paying 46 the price. 47

48 You end up trying to find a way to make us have fewer

1 interactions to rebuild what they messed up, and, I mean, look at BP, and we're going through that right now in our industry, 2 and so we don't want that to end up on our backs. 3 If you think that there could be noise from these windmills that's going to 4 5 interfere with these whales, we want you to put it out there to BOEM now, and be on the frontside of this, because, once the 6 7 windmills go into place, it's just like the windmills that you -8 - You have an oil platform, at one point anyway, in the middle 9 of the Flower Garden Sanctuary, because it was there before you designated it, and so you can't get rid of it at that point, and 10 11 it's there, and so we want you to be thinking about that on the 12 frontend.

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14 The other thing that the Shrimp AP brought up is that we're 15 seeing some of these windfarms on the east coast that are out 16 there, and, all of a sudden, they're no longer profitable. 17 Interest rates have gone through the roof, and that changes the 18 dynamics of the economics of these entities and their contracts 19 from what they're going to get paid per kilowatt hour, or 20 whatever it is, of this energy, and so there's a possibility now 21 that these things can be sitting out there idle, because they're 22 not profitable, but they're still out there taking up trawlable 23 grounds, right, and so, in the oil industry, if you have an oil 24 platform that is no longer producing oil for this country, 25 energy for our people, then there's a requirement that says, after X number of years of it not producing energy anymore, 26 27 you've got to get it out of there and give that bottom back to 28 the other user groups in this country that are producing 29 something for the nation, and that would be us, producing 30 protein by shrimping those grounds, and so they don't have that 31 in place for the wind energy yet. 32

33 We're seeing that this is a real possibility, and we want to 34 make sure that idle iron NTL goes into place in the Gulf of 35 Mexico, right alongside the installation, and we don't want it 36 after the fact, and we want to know, going into it, that you're 37 going to get it back out of shrimp grounds if it's not producing 38 anymore. 39

40 You can see that all of this is kind of reflected in that motion 41 there from the Shrimp AP to continue to go through this process 42 with NMFS and make sure that we're on top of this, to minimize 43 any adverse impacts on the shrimp industry.

The next item on our agenda was the update on the reinitiation of the shrimp bi-op, due to sawfish and giant manta rays, and we had a lot of good conversation about this, and we really got into some details, and I thought there was some good questions

1 asked. 2 3 Generally speaking, I would say that the AP was a little worried about there not being enough interaction with the fishermen in 4 5 this process, with the fishing industry, and we want to make sure that we have a voice in this, that we're telling you what 6 we see, and you tell us what you see, and we can groundtruth 7 8 each other, right, and so we do want to make sure that we 9 somehow have a larger voice in that and a seat at the table. 10 11 All right, and so the next agenda item was the Endangered 12 Species Act Listing and Critical Habitat Rule Update, and so, in 13 this presentation, we actually -- It was sort of like four 14 presentations in one, and so there's all these different 15 critical habitat designations going on at the same time right 16 now within NMFS, or recently close to each other, relatively 17 close to each other, and a couple of them I want to point out. 18 19 Let's do the Rice's whale first, and so -- Well, we'll start 20 with the sea turtle, because that's the one right there, and the 21 green sea turtle is on the board, and so let's start with that 22 one. 23 24 We did pass a motion, and the motion references a comment letter 25 that was submitted by the Southern Shrimp Alliance, which is an industry trade group that represents all the Gulf states, as 26 27 well as the South Atlantic states, that produce shrimp, and so they wrote a letter really having some reservations about the 28 29 proposed critical habitat designation for the green sea turtle, 30 and I will just -- You really should read the letter, okay, and it's very well written, and it's rather lengthy, and I won't do 31 it justice here, but to give you some kind of idea about what 32 33 our reservations are there. 34 35 With the green sea turtle habitat designation, and so there's 36 284 references to unpublished data in the biological report, and 37 literally 100 percent of the sixteen citations for the stranding 38 data in Table 3 of the biological report are for unpublished 39 There are references, and reliance, on unpublished shrimp data. 40 trawl bycatch, and so these are all unpublished data, and you 41 would have to assume that that has not been subject to the same 42 rigorous peer review standards that are in place for published 43 data that have to go through that type of peer review. 44 45 We are worried about the heavy reliance on unpublished data in this, and the other thing that really concerned us is this idea 46 of these conservation values that are being placed, and they're 47

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not -- They're not quantitatively crafted, and it's more of a

1 qualitative justification, given at a high, medium, or low conservation value, and that is what dictates should be critical 2 3 habitat or not, and so we have some reservations about that as 4 well. 5 6 All of these -- When you start bringing all of these things 7 together, it undermines the confidence that the industry has in 8 the reliability of the conclusions that are drawn in that 9 proposed rule, and this can have implications for our industry later on, and this will not, in itself, cause us to have 10 However, there will eventually be a biological 11 regulations. 12 review, and this will be part of it. It will come up, and there 13 may be reasonable and prudent measures, which, i.e., more 14 regulations on our fishery, in order to make sure that we're in 15 compliance. 16 17 We just want to see quantitative, hardcore data that is really 18 justifying this, and not quite so much touchy-feely, and we want 19 to see some numbers. 20 21 The Rice's whale, the critical habitat for that, and so, right 22 now, I think the proposed rule -- The depth contours that they 23 want to use are a hundred meters through 400 meters, if I remember correctly, and is that right, Andy? Is that top line 24 25 right, the 400? Okay. 26 27 So our -- Again, this is going to reference -- This motion from 28 the Shrimp AP references another letter that the Southern Shrimp 29 Alliance wrote and submitted as public comment for this critical 30 habitat designation, and I'm sure that Dr. Freeman, or Dr. Simmons, can get you all of these letters, if you would like to 31 32 see it, and I won't do it justice, but I will try and quickly 33 kind of highlight the things that we are concerned by in the 34 shrimp industry. 35 36 If you look at the actual observational data, and like I put my 37 eyes on the whale kind of data, right, and not modeled, but I 38 saw it, and so those data suggest that the critical habitat area 39 should be much deeper than what you have it listed at right now, deeper than that hundred-meter isobath, and it should be -- It 40 41 suggests that it should be closer to the 150-meter isobath. 42 That is important because of this. 43 If you look at your shrimp data, and your effort, that you have 44 45 from our ELBs, you will see there at your disposal is significant shrimping effort, from that data at least, all the 46 way out to about 120 meters, and so, if this whale is not really 47 in this hundred meters, and you don't have any physical 48

1 observations of it being there, and we're modeling it to be likely creating a problem 2 there, then we are between 3 stakeholders that does not exist, that you will have to deal with, and regulate, when it's really not an issue. They really 4 aren't overlapping. Do you see what I'm saying, and so it's 5 6 important to get this cutoff right.

There is one predictive model that is referenced in that 8 9 proposed rule, in the data behind it, and that predictive model even points to the 200-meter isobath as being an important area 10 11 that those whales occupy, and there's only one predictive model 12 that is putting it shallower, and that is a yet-to-be-published 13 paper, and so that's not a published model, a published paper, 14 yet, and that's the one that says it might should go into that hundred-meter isobath, but you don't have hardcore eyes on the 15 16 whale in that depth, and you have one predictive model that puts 17 you closer to 200, and so the shrimp industry is asking, through 18 the Southern Shrimp Alliance, what I thought was fairly 19 conservative, and we only asked you to go out to the 120 meters, 20 when, really, your data puts you at closer to 150 to 200.

22 you read further in the letter, we also give you some Ιf rationale for backing out that 400-meter isobath contour, back 23 24 it up to about that 350, because what you're getting into there 25 is your royal red grounds, and that's your royal red shrimpers. They shrimp in that deeper water, and, when I said that 120 26 27 earlier, 120 meters, I quess that I should be specific, and I'm 28 talking about brown, pink, and white, okay, and not royal reds. 29 I'm talking about your penaeids, brown and pink and white, 30 penaeid.

Pass the letters along, if you can, so that they can read the full letter, but I think this is important for the council to think about, because it's going to land on your plate later. It probably will be better if we can make sure we get those lines where they really should be in the first place and be forwardthinking about it.

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39 All right, and the only other item under that agenda item -- So 40 it's the listing of these five Caribbean corals as endangered 41 species, under the Endangered Species Act, and it really caught all of us by surprise, because we had not heard about this year, 42 43 and it's already final. It's in place, and it's been done, and I think you all heard about it for the first time at your August 44 45 meeting, and so it got presented to us now, but it's already 46 been implemented, and it's never been before the Shrimp AP, and, 47 when I looked at the timeline, I think Protected Species has 48 been working on that, off and on, since 2014, and I was on this

1 council from 2013 to 2022, and, for the life of me, I cannot remember it ever being presented, and it was a huge area down in 2 the Keys that is being taken in as critical habitat. 3 4 We didn't get much background on it, just looking at it, and it 5 looks like there's probably a lot of modeling that was possibly 6 7 involved in it, and we had some reservations about that, and we 8 would like to see the data, and maybe even see the council write 9 a letter to NMFS and say, hey, you know, I know you've already done this, but you didn't present it to us until the last hour 10 11 here, and we didn't get any feedback from our APs, and it seems 12 to be something they're concerned about, and so we're having 13 hell in our industry right now. 14 We're at a precipice. The shrimp prices have bottomed out, 15 16 because the imports have finally gotten to the point where it's 17 not just -- They're not just depressing our price anymore, but 18 they have filled up all the freezers in this country, and 19 there's not enough people to even go buy them, and so the demand 20 is gone, and so we're doing good if we can find somebody that 21 will unload the boat. 22 23 About the only shrimp, brown, pink, and white, that there's still a little bit of a market for, that we can sell our shrimp, 24 25 find somebody to buy them, is pink, and I'm not sure why that it is, and maybe because they don't raise them in ponds overseas, 26 27 and I don't know, and that critical habitat designation for those corals -- That's down in our pink shrimp grounds, and 28 29 we're worried that's going to come back to bite us, that somehow 30 that's going to end up in regulations. 31 32 We just want to see the science that it was based on and see, 33 you know, how you came up with that, and why you didn't present 34 it to us earlier, so we could give you feedback, if maybe it 35 should have been tailored a little bit more, and so we hope the 36 council will take that up with NMFS, and that's about the only 37 thing we've got left going for us at this point. I think that's 38 it, but let me make sure. 39 40 CHAIRMAN SCHIEBLE: Thank you, Ms. Bosarge. I almost had to 41 invoke the public comment buzzer. 42 43 MS. BOSARGE: You're shutting me down? 44 45 CHAIRMAN SCHIEBLE: We're getting close on time. 46 47 MS. BOSARGE: Well, that's it. I'm at the end. 48

1 CHAIRMAN SCHIEBLE: Perfect timing, as usual. Thank you. The 2 final item on the agenda is Other Business, and I will let Dr. 3 Simmons kick that off, and then I believe that Dr. Walter has a 4 couple of items to go through.

OTHER BUSINESS

8 EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair, and so we may 9 have to come back to this at Full Council too, but I will just put the request out there that the council sent a letter to Dr. 10 11 Werner, after Evan Howell gave us a presentation, Dr. Howell 12 gave us a presentation, regarding the climate resilience, the 13 IRA funding, and I think there was some idea that the data 14 acquisition, the data -- I think it's called the Essential Data Collection and Advanced Technologies portion, or pot, 15 of funding, if that potentially could be used to help with 16 17 advancing technologies in the shrimp fishery.

We did send that letter, and we did talk about it, just briefly, at the Council Coordination Committee last week, and we were told that there is some regional spend plans that may be coming out, and we didn't know how that might fit in with this, but, if you had any updates for us, Andy or Clay, that would be great, on that letter.

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26 DR. PORCH: We've read the letter, and we're considering it. 27 The bottom line is the spend plans have been pretty well developed, and so what we're looking at now is if there's any 28 29 gaps, any funds available, and there's a lot of things in the 30 queue and so, at this point, no decisions, no firm decisions, have been made, but it would fall in a long queue, and so I 31 32 don't have any good insights of whether it could be funded or 33 not through IRA.

35 EXECUTIVE DIRECTOR SIMMONS: Just one quick follow-up. Thank 36 you, and so the other thing that was discussed is the councils, 37 the regional management councils, potentially updating their 38 research and monitoring priorities to help with this effort, and 39 is that futile at this point, that the spend plans are already 40 pretty fully vetted and it's not useful for us to update those? 41 We would be normally next year, under our five-year budgeting process, but this would be a more focused, I guess, effort, and 42 43 I think that was briefly discussed at the national level, but it hadn't trickled down, I guess, to the regional level, if that's 44 45 something they wanted us to do, but we can circle back at Full 46 Council, and I will just put that out there. Thanks.

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48 CHAIRMAN SCHIEBLE: Okay. Thank you, Dr. Simmons. Mr. Gill.

1 2 Thank you, Mr. Chairman. Before it escapes us, Leann MR. GILL: 3 mentioned the possibility of the two letters regarding sea turtles and Rice's whale comments from SSA, and could we ask Dr. 4 5 Freeman to provide those to council prior to, for consideration? At the AP, which I attended, I was impressed with the rationale 6 7 that was given verbally as to those, but I would like to 8 understand it better before we get into whether we follow those 9 up with a council motion. Thank you. 10 11 CHAIRMAN SCHIEBLE: So you would like those before we get to 12 Full Council, or are you talking about before the January Shrimp 13 Committee meeting? 14 MR. GILL: Before Full Council, because that's where we're going 15 16 to discuss what we're doing here in committee. 17 18 I was just making sure CHAIRMAN SCHIEBLE: Yes, and I agree. 19 that's what you meant. Dr. Freeman, is that possible? Did you 20 hear what Mr. Gill asked for? 21 22 DR. FREEMAN: Yes, sir, I did, and I sent a PDF version of those 23 two letters to our admin staff earlier this morning, just in 24 anticipation that a committee member may request that, and so I 25 will verify with them that they can get that sent out before 26 Full Council. 27 28 CHAIRMAN SCHIEBLE: Thank you, Dr. Freeman. As usual, you're 29 ahead of us. Mr. Strelcheck. 30 31 MR. STRELCHECK: Well, I will just add -- I mean, I can't speak, 32 obviously, for the council and what you want to do with regard 33 industry letters, but the agency has an obligation, to 34 obviously, and we've gone out, and we've solicited public input 35 and comments, and so now we're reviewing that public input and 36 comments on our rulemakings, and certainly we'll consider that 37 as far as any sort of further development of the final rule, 38 just like the council would do any sort of rulemaking as well. 39 40 Thank you, Mr. Strelcheck. CHAIRMAN SCHIEBLE: I see Dr. Walter 41 has his hand up, and I want to ask you a quick question before you speak, and so are you available Thursday? Are you going to 42 43 be on the call during the Full Council period, where possibly you could give the presentation on the early adopter program, or 44 is that something that Executive Director Simmons wants to do 45 now? It's these last three agenda items, Tab D-6(a), 6(b), and 46 6(c), and are we wanting to do those during Full Council? 47 Are you available, Dr. Walter, or do you want to do that now? 48

2 **DR. WALTER:** I would be available, and I think we could pretty 3 much knock that out by saying that the handouts are available, 4 and we don't even need a presentation. I do have one other very 5 short comment to make.

7 CHAIRMAN SCHIEBLE: Go ahead, please.

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9 DR. WALTER: So one of the things that we're working on is trying to find synergies between the turtle project, which is to 10 11 implement effort monitoring in inshore waters, mostly in state 12 waters, but, because most federally-permitted vessels are also 13 state-permitted, those vessels may also be applicable to that, 14 and that project has a substantial amount of funding available to it, and so, if there are synergies that could be made between 15 16 the turtle project and the early adopter program, it could be 17 very valuable, particularly because I think one of the AP's 18 goals is trying to implement --

20 To ensure that the new effort monitoring has the minimal 21 economic impact on the fishery, and so, if they could be vessels 22 to get effort monitoring units through the turtle program, maybe 23 in a similar way as the early adopter program, and we're exploring that, and I know that the AP was not a fan of the 24 25 turtle project, but the reality is that effort needs to be monitored, and it's an essential element of what allows the 26 27 fishery to be authorized under the biological opinion, and so 28 more data is actually better data to inform the process, and, if 29 they can get free units, I think that's something that might be 30 palatable. Anyway, more to come on that. Thanks.

32 **CHAIRMAN SCHIEBLE:** Thank you, Dr. Walter. Do we have any other 33 further comments, or questions, around the committee? Seeing 34 none, Dr. Freeman, do you have anything further, before signing-35 off?

37 DR. FREEMAN: That's all. Thank you, Mr. Chair.

39 CHAIRMAN SCHIEBLE: I appreciate it. Back to you, Mr. Chair, 40 and that concludes the Shrimp Management Committee. 41 42 (Whereupon, the meeting adjourned on October 23, 2023.) 43 44 ----