Day 1 - March 1, 2023

Attendees:

Executive Committee

Mike Haynes Thomas St. John Sharon White

Pam Sullivan Jay Anders (Past Chair) Jim Hancock (General Counsel)

Board Members (in person unless noted)

Carl AtkinsonSuzanne BiddleSuzanne GrassellScott HennesseyRandy HerrinSarah Kulpa (Advisory)

Jeff Leahey Joel Ledesma (Advisory- virtual) Chris Mattson

Alan Michaels Megan Nesbitt Dan Petcovic (Advisory)
Romain Pellegrino (Advisory) Chris Rousseau Chuck Sensiba (day 2 only)

Mary Gail Sullivan (virtual)

Justin Trudell (virtual)

Eric Van Deuren

Heidi Wahto Rich Wallen (virtual- day 1)

NHA Staff/ NHA Committee / Council / Task Force Representatives

Marla BarnesFrancesca Blanco HadjimichaelJeremy Chase-IsraelLeRoy ColemanKimberly CostnerMarycella DumlaoChris HayesAnthony LauritaJoseph LoSassoBrittney MayMichael PurdieKelly RogersCatherine RyanMalcolm WoolfPaul Gay

Other

Deb Mursch (GE) Katia Debion (GE) Mike Pederson (MHUG liaison)

Ross Olchyk (SCE)

[Note: 19 of 20 voting Board members were present, representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Eastern.]

Notes follow the Board meeting agenda (Item #) included in the final Board Book, unless noted.

Board Meeting starts at 8:59 AM Eastern – Mike introduces new Board and Advisory Board members. Malcolm/Jeff share a safety moment for exiting building.

MARCH 1, 2023 MEETING SUMMARY NOTES

Item 1 – CEO Report Out

- Malcolm introduces new NHA team members (Chris Hayes and Brittany May), presents CEO report, shares updates on progress made on NHA's 2023 Strategic Priorities and Uncommon Dialogue. Details are provided in the Board Book.
 - Will Pisano departed NHA for Congresswoman Kuster's office, NHA actively looking for replacement.
 - Uncommon Dialogue proceeding apace, 7 working groups are engaged, working Groups on basin-scale decision making and off-site mitigation have been particularly successful. Joint grant application filed with DOE- decision expected soon (\$600,000 for NHA over 24 months).
 - DEI- updated bylaws, NHA having retreat later this week to think about DEI and implicit bias as organization. See Board book numbers on benchmarks.
 - o "NHA by the Numbers" handout- to be made available at WPW.
 - NHA Staff Responsibility List- which staff is responsible for what.
- Some key topics discussed include:

- Advocacy topics: outside speakers from the Hill and DOE representatives and Bracewell reps for tax implementation; DOE infrastructure grants; 3Rs legislative tax proposal; CWA 401 litigation; tax credits; licensing reform; and updates on Markets, Pumped Storage, and Marine Energy.
- Connect topics: WPW on track, Clean Currents already over \$1 MM; Regional Meetings (Midwest meeting April 25-26)
- Inform topics: participation in committee and council meetings; deepening technical programs; Digital Media Campaign updates; reimagining OpEx, Powerhouse and Playbook.
- Implement: Strong financial position well ahead of budget; membership at all-time high; renewals on pace; office relocation completed; actively searching for new Legislative Director.

Item 2 – Treasurer's Report

- Thomas St. John presents the Treasurer Report. No slides presented but data is provided in the Board Book. Some highlights include:
 - NHA ended 2022 significantly ahead of budget due to strong membership retention, new member recruitment, and revenues from WPW and Clean Currents.
 - NHA finished the year with a net positive of \$11k over Board-approved adjusted budget of \$1,440,673.
 - o Collected 121% of budgeted revenue.
 - o 2022 Clean Currents net profit was >\$500k. Net profit of 15% in 2023-24 expected.
 - 2022 WPW net profit was \$82k. Registration slow for 2023 but expected to catch up.
 - Investments are down \$158k, but only 18% of NHA's finances are invested.
 - NHA re-investing profits back into industry with expanding staff, digital media campaign, legal costs.
 - Upcoming audit- we could expect report to include more recommendations than in past years because of changes in accounting rules and requirements.
 - Thomas circulated 2023 revised budget.
- Jeff: Membership update: recognized that Douglas County PUD has joined NHA.
- Marla: Good discussions with other potential members, tremendous growth aided by CC. Chris Hayes will help connect with other potential engineering members.
- See membership update in Board book. Includes top prospective members.

Item 3 – "More Than Just Clean Energy": Next Steps for NHA's Digital Media Campaign

- LeRoy presents a high-level of "what's next" for the Digital Campaign.
- Deployed ad in Northeast and Southeast. Ad was highly successful and targeted to show what hydro brings to the community. Raised hydro's favorability from the group surveyed, especially millennials.
- What's next- currently in the midst of fundraising to launch a new campaign for 2023; want
 to promote how we pair with other renewables; developing draft ad with input from steering
 group; expand geographical reach to Midwest.
- Scott posed question of at what point do we build this into the budget rather than individual member contributions. Malcolm notes we are already making that transition- already devoted \$300k to effort this year.

Item 4 – Guest Speaker: Emily Domenech, Senior Energy Policy Advisory, House Speaker McCarthy's Office

- Emily Domenech describes House Speaker McCarthy's legislative priorities and how the new House Republican majority might impact energy and electricity policy.
- Republican conference has diversified and is interested in more issues than oil and gaswants to be the "all-in" conference. Task forces formed in last Congress set us up to govern, Energy Climate and Conservation Task Force gives good mix of bills and policies if Rs took majority. Well set up to have a number of bills that are ready to go. What we do in this Congress shouldn't be a secret.
- Had two criteria when putting together bills for task force- needed bills that get to 218 votes with R support, and bills agreed on when we had cross-jurisdictional issues.
- We will have a comprehensive energy production and permitting reform package on floor by end of March. Going through mark-up process now. Hydro provisions needed a longer runway- still under consideration, won't be in Q1 package. Very interested in FERC reform in this Congress.
- NEPA reform is first because there was already a well-developed bill from 2019 under Trump administration.
- We have a R conference that is interested in advancing energy packages that increase American competitiveness, maintain or decrease consumer costs, maintain or increase security, and reduce global emissions.
- Looking for ideas from members on how to reform FPA. Look for opportunities to join other industries that are facing the same challenges, like ESA.
- Carl comment: any legislative reform on storage and renewables should include hydro.
- Scott: hoping for tax policy for existing hydro. Emily- unlikely we'll be able to reform the IRA. Political reality is that the likelihood of an energy tax package is slim to none right now.
- Malcolm: industry is facing wave of license surrenders because of cost of relicensing and needed upgrades. IRA did not include assistance for existing hydro (Emily agrees- it's an unfair law). How to create level playing field? Emily- it's absurd that relicensing costs so much and takes so long. Rs are pro hydro- instead of grants, need to look at why the process takes so long and what can be fixed on the regulatory side.
- Malcolm- how do you see relationship with House and Senate and chances of success of hydro bill in Senate? Emily- Senator Manchin has learned, wants House to move first on permitting reform. Cathy's bill fits well within 4 corners of permitting reform discussion. Better prognosis than it has in the past. Don't give up on it.
- Carl: grid and transmission issues greatly impact hydro development. Where will that be tackled? Emily- Builder Act will apply to pipeline and transmission- any big building projects. But there is no appetite for federal government to fund transmission.
- Deb: While Rs want IRA to go away, it makes it hard for big companies to engage in long-term planning. Emily- we understand and are trying to make things more predictable. Don't like big one-party bills that are jammed through. This is why we want 4-corner permitting bill to be long-term and lasting legislation.

Item 5 – Inflation Reduction Act Implementation

- Michael Purdie introduces new outside counsel from Bracewell, led by Tim Urban, Liam Donovan, and Yasmin Nelson.
- Jeff provided overview of hydropower provisions in IRA.
- Board discussion on concerns with respect to IRA implementation and past meetings with Treasury on this issue.
- Bracewell team provides update on Treasury's implementation of IRA provisions.
- Major implementation issues include:
 - o Domestic content- component/subcomponent, onsite manufacturing requirements
 - GHG emissions from reservoirs and qualifying as a "zero carbon" technology for credit
 - Direct pay requirements and how applied to public power
 - o Rural areas and transferability for for-profit companies
 - Hydrogen production credit- hydro assets looking at how to take advantage of that credit to generate hydrogen at their hydro facilities.
 - 80/20 rule, primarily used to determine who qualifies for wind tax credit. Treasury
 has said that if you put new blades on wind turbine and it upgrades 80% of asset
 then facility is considered new. How can hydro industry use this? If refurbishing
 powerhouse at 80%, is that new?
 - NHA ad hoc group is tackling these issues.

Item 6 – NHA's "3R" Tax Proposal to Maintain Existing Hydropower and Pumped Storage

- Malcolm Woolf presents on NHA's efforts to advance "3R" tax credit proposal to maintain and expand existing hydropower and pumped storage.
- Emily did not encourage tax credit provisions now, maybe tax extenders later this year. When next tax package moves, we want to be baked into it.
- NHA got bill reintroduced during lame duck in bipartisan way, lower cost score (good). Can
 we get into President's budget? Probably too late. On Senate side, will do bill introductionneed Republican on finance committee to co-sponsor. On House side, less activity, but
 Congresswoman Kuster will re-introduce.
- Bracewell team shares what they have heard from Capitol Hill.

Item 7 – Getting to Yes: Additional Financial Resources to Support Waterpower Investments

- Malcolm Woolf presents on non-hydro specific programs run by the DOE Loan Program
 Office, the U.S. Department of Agriculture, and the U.S. Environmental Protection Agency
 that could help finance investments in the waterpower industry.
- · Topics include:
 - 1706- new program under DOE loan office- money for existing hydro facilities, loans for refurbishments or anything in existing fleet. 30-year payback period.
 - USDA Section 22001, \$1 billion in forgivable loans- For public power and IOUs. For new generation or refurbishments of existing programs (flexible).
 - USDA fundings for projects that can produce generation for co-ops-\$10 billion
 - Army Corps program for dam safety investments.
 - US EPA program \$27 billion for zero carbon projects, \$7 billion for energy sector.
 No guidance on this yet.
 - Swath of programs under NOAA for environmental improvements, river restoration, fish passage, etc.
 - NHA will push out information through webinar series, Powerhouse articles listing all incentives with links, another session at WPW to discuss.

<u>Lunch</u>

Item 8 – Consent Agenda / General Updates

- Mike Haynes notes the Consent Agenda Items are listed in the Board Book, including the updated Committee and Council report.
- Jay Anders makes motion to approve consent agent; Eric VD seconded. Motion passed.

Item 9 – Deepening NHA's Technical Programs and Training

- Chris Hayes, NHA's new Senior Advisor of Technical Programs and Training, presents on opportunities to enhance NHA's technical programs and services.
- The following options were presented for consideration:
 - Deepening NHA's Hydropower Technology Community, including Opex program;
 - o Re-launching NHA's "Hydropower Academy" for new technical training;
 - o Expanding NHA's engagement with hydropower asset owners; and
 - Helping to shape the technical content of NHA's major events.
- Training considerations: (1) Look at target audience- people new to power/hydropower- 101 material and/or more detailed technical training. (2) Scope- hydrology to protection/control/grounding- use a framework to strategically plot topics we want to take on and identify gaps. (3) Delivery- in form of webinars, in-person training, in-person visits to utilities, customizable training materials to hand off to utility. (4) Resourcing- need bandwidth to deliver, either through budget to hire experts or utilities make experts available.
- Key takeaways from Chris' time at CEATI- timely programming in anticipation of where things are going, hands on dialogue, relationship building, adaptability.
- Sarah- using existing programs like Opex or Warp makes sense. HDR offers lunch and learns that are successful.
- Eric VD- key to understanding where to go is to understand what exists and where the gaps are that are least difficult to fill. May use a survey to identify.
- Megan- how to streamline large topics and provide training to new engineers.
- Try to find areas where there are unserved needs and dive in.
- Alan- offer continuing legal education or comparable technical credits to get people to participate. Credits are regional- need to look into how to secure them.
- Carl- need training on regulatory issues, like 401, license amendments, licensing.
- Chris- owner to owner networking
- Thomas- we should aim to introduce something new at CC this year.
- Randy- need to prioritize getting value out of Opex program and getting member engagement in that tool.

Item 10 – Show Me the Money: Bipartisan Infrastructure Law Implementation

- Mike Purdie updates the Board on implementation of the three "240 grant programs."
 - Section 242 (incremental new hydropower)- \$125 million. DOE last issued payments for CY 2020. Upcoming RFI may solicit applications for CY 2021 and 2022.
 - Section 243 (efficiency improvements)- DOE is going straight to final guidance this spring.
 - Section 247 grants- NHA filed comments on draft guidance yesterday, EEI and APPA signed on. DOE indicates that guidance will be finalized during WPW.
- Jeff- Secretary pushing to get money out and is reason for quick turnaround on guidance documents. NHA has invited Secretary to speak at WPW.

- Malcolm- We filed second set of comments with Uncommon Dialogue yesterday. Two big themes- (1) DOE did not establish this as a rolling program for everyone that qualifies.
 Fallback was submit application and pro rate- DOE has rejected this and established complicated grading system if program is over-subscribed. (2) requirement that applicants need all permits to be eligible for a grant. Should NHA engage on Capitol Hill on these issues?
- Suzanne- what to do with provisions that we can't comply with- Buy/Build America, projects that were already underway and didn't know requirements.
- Thomas- restricting funding to FERC project level, rather than FERC facility level, is limiting. Also, additional NEPA analysis when project already went through NEPA at licensing.
- Scott- we should go to the Hill to ask for help. Angus King on Senate Energy would be a good place to start, as well as Senator Manchin.
- Need to include EJ considerations to meet community impact statement requirement.
- Action Item- NHA to seek meetings on the Hill with Angus King and others to seek assistance on IRA implementation issues of concern.

Item 11 – Methane: Bubbling Up Again

- Anthony Laurita provides update on NHA's efforts to address allegations attributing methane emissions from reservoirs to hydropower facilities at EPA, World Resources Institute, and in the Uncommon Dialogue.
 - Patagonia petition for rulemaking to EPA- requires reservoir owners to measure and state methane emissions. American Rivers (Uncommon Dialogue) signed on but at staff level. NHA filed response and comments to World Resources Institute. Q2 2023 final rule expected.
 - Working with Shannon Ames and Uncommon Dialogue on 2-pager on this issue.
 Themes include that there are naturally occurring methane emissions from all water bodies and nothing in hydro operations creates methane.
- Brennan Smith with HDR provides a technical discussion of the science behind methane emissions in existing reservoirs.

Item 12 - Guest Speaker: Jennifer Garson, Director of DOE's Waterpower Technology Office

- Jennifer was joined by her colleagues:
 - o Allison Johnson
 - Sam Bockenhauer
 - Ali Hewett
- Jennifer and her team addressed the following topics:
 - DOE's efforts to expand U.S. hydropower manufacturing
 - Next steps for DOE's "Hydropower Vision"
 - o DOE's new "Hydropower Pathways" project
 - Update on HydroWires
 - o DOE's ongoing efforts to address the hydropower workforce development challenge
- Discussion included:
 - Supply chain issues- DOE received \$59 million in appropriations plus funding through Infrastructure Act. Only have about \$47 million to spend- need to be judicious in allocating funding.
 - o Jennifer went through list of open funding opportunities for hydropower.
 - o DOE saw record number of applications for all grant programs this year.
 - Manufacturing- some domestic manufacturing of hydro components, but foreign competition is more cost effective, and quality control costs increase.

- WPTO was asked by Secretary to convene workshops with hydro community on challenges and opportunities of manufacturing and how to incentivize domestic production. Forthcoming Market and Hydropower Investment Assessment Report with Deloitte.
- Working on Advanced Manufacturing Report- to be released in next few weeks.
- Looking at incentives to encourage domestic production- maybe Section 1706 program could help.
- DOE asking how it can help with industry needs on manufacturing.
- Malcolm- Massive amount of investment in hydropower. Administration is focused on manufacturing being done in the United States. If we can show strong demand for new manufacturing through refurbishments, DOE can help make that happen. Need to make case on what we need and work with DOE to translate that into assistance. Demand signal can come from 4 buckets- private sector, federal fleet, new development (PS and NPD), and Canadian demand for US manufacturing.
- o Carl- small business is domestic, shouldn't be overlooked.
- Reimagined Hydropower Vision Roadmap- led by Tim Welch. Working on goals and where we want to be by 2050, and concrete activities to help us measure, prioritize, and achieve the goals for 2050. Working with NHA members to come up with actions to update roadmap. Labs are driving this work. Not DOE goals, but goals of industry. We are working toward a written roadmap to update original roadmap issued in Vision Report.
- HydroWIRES Research Areas and Recent Work- initiative to understand value of hydro's contributions to reliability, resilience, and integration in electricity system. Study on PSH liners is forthcoming. PSH potential in Alaska study is coming.
- o DOE staff can brief anyone on Capitol Hill on benefits of hydro, but not proactively.
- How can NHA help to get DOE in front of FERC, NERC, and RTOs to educate on the many services provided by hydro? These entities aren't thinking about this.
 How to keep these essential grid services online in 2035? Is there a way to connect research on HydroWIRES and elsewhere that there is a reliability cliff?
- Modeling anomalies- brownouts like in Australia or Texas. Show impact of PSH on getting grid back online. Batteries don't perform in these situations. Message is not being told.
- Workforce and STEM activities- DOE prepared US Hydropower Workforce
 Challenges and Opportunities report in 2019, updated in 2020. Student and recent graduate fellowships and competitions. 150 students to attend WPW.
- Lack of mid-career, 15-year experience workforce. Is there more we should be doing to address this? Tap into Nuclear Navy- same skill sets (invite Carter Rock to WPW). More analysis on retention problems. Hiring veterans.

Board Meeting ends @ 4:53 PM Eastern

Day 1 Action Items:

NHA to seek meetings on the Hill with Angus King and others to seek assistance on IRA implementation issues of concern.

Invite auditors to participate in next Board meeting

NHA to circulate DOE slides to Board.

Day 2 - March 2, 2023

[Note: 20 of 20 voting Board members were present, representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Eastern.]

Notes follow the Board meeting agenda (Item #) included in the final Board Book, unless noted.

Board Meeting starts at 8:31 AM Eastern.

MARCH 2, 2023 MEETING SUMMARY NOTES

Item 13 – Guest Speaker: Melissa Klembara, DOE's Office of Clean Energy Demonstrations

- Melissa is Director of Portfolio Strategy at OCED. OCED is part of DOE's Infrastructure side that includes grid deployment, OCED, loan programs, manufacturing office, and federal energy management.
- Rural and remote community and mineland funding opportunities may be applicable to hydro.
- Energy storage \$505 million in funding- looking for projects to commit, FOA is out.
- DOE may not spend all money in first go-around of funding, may re-release 2nd or 3rd FOA in a year or two if money is still available.
- DOE prefers low-risk technology like PSH and other renewables for rural and remote communities.
- OCED is technology agnostic office.
- Dan- a roadmap on when technology is advanced enough to qualify for OCED funding would be helpful.
- Melissa: DOE wants to provide funding for demonstrations and learn from that to share with investment community for further funding.

Item 14 – Cross Currents in the Pacific Northwest

- Suzanne Grassell discussed the numerous cross currents in the PNW, including efforts to remove the lower Snake River dams, renegotiate the Columbia River Treaty, and the evolving relationships and growing sophistication of Tribal nations.
 - Markets are good and incentives are available for hydro
 - Concern over federal mediation process on lower Snake River dams. While federal projects, fate of projects is big reliability issue in PNW.
 - Pending policies could threaten hydropower's regulatory status and market position.
 - o Affordability of hydro is less important than other policy goals in today's climate.
 - Shift from building on existing infrastructure to building new technologies and new transmission.
 - Shift from mitigation programs where fish and hydro coexist to dam removal and unattainable WQ standards.
 - News focus is that hydro is threatened by drought.
 - Lower Snake River dam removal has gone into a closed-door mediation process led by CEQ. Not all power interests are at the table. Federal family seems to be aligned behind breaching dams even though they are their dams. Process is concerning and makes hydro look bad.
- Board discussion on how NHA to can help the industry navigate these issues, including:
 - NW River Partners isn't asking for NHA assistance yet, but it may down the line.

- EESI briefing could be helpful to discuss drought, floods, role of hydro, climate change, etc.
- o A one-pager for Advocacy Day during WPW on these issues.
- Get DOE to do study on impacts of dams on reliability.
- Most cross currents are national issues, not just PNW. Need to get our case out there. Need to be mindful of these issues.
- Series of tactical responses- simple messaging, engage at CEQ and other briefings, combining headwinds conversation with Hydro at Risk conversation- can NHA do anything to help members keep projects operating and not surrender?
- Eric VD- must message that existing fleet produces spinning reserves to keep generating, especially in California (hydro operates from 4-9 pm in summer to keep the lights on).
- Action item: Sara Gonzalez-Rothi at CEQ handles water- used to work for Commerce Committee. Make connection. Stephanie Harding is Director of Lands at CEQ. Harding used to work in Tester's office (Montana). Connections to hydro. Suzanne should reach out.
- o This is appropriate content to cover at CC and WPW.

Item 15 – Legislative License Reform: Next Steps

- Chuck provides update on licensing reform (Uncommon Dialogue) effort.
 - NHA has been talking with Senator Daines and he is interested in supporting package on Senate side. Making inroads toward getting Maria Cantwell on board. Hope is for a co-sponsored bill introduced in Senate possibly within next month or so. There is a draft bill and we are in finishing touches of tweaking language.
 - Still looking to develop Hill strategy on House side. Cathy McMorris-Rodgers has her own hydro bill. We'd like to see something that can actually reach President's desk.
 CMR's bill is beneficial to industry but not something that would pass. Working with her office to advocate for bipartisan package and trying to make inroads there.
 - In last year, as package has been more socialized across industry, we have learned that there are aspects of package that give some members heartburn. We acknowledge those concerns. As package moves forward, the other side may have some suggested changes to address those concerns.
- Malcolm- Emily indicated we won't be part of first permitting package, which is more focused on NEPA, ESA, etc. Another package over the summer- important we are part of that. Cathy McMorris-Rodgers is Chair of committee and getting her support is our goal. In scenario where bipartisan Uncommon Dialogue and CMR package are passed, a conference to resolve differences would be great.
- Jim- some bills need to marinate on Hill. The time will become ripe.
- Scott- NHA is about to get a grant from DOE to continue Uncommon Dialogue. If Congress can't pass licensing reform and refuses to pass tax incentives, what's left to pursue? Chuck- we can work into next Congress.

Item 16 - Clean Water Act Section 401 - Ongoing (and likely future) Litigation

- Chuck updates Board on litigation and policy-related issues regarding the CWA 401 Rule:
 - History of MID/TID and NID/Modesto/Yuba case.
 - Ninth Circuit NID/Modesto/Yuba case- no evidence state coerced into withdraw and resubmit so no waiver. Petition for certiorari filed at SCOTUS last month. Amicus brief for industry to be filed next week.
 - o MID/TID D.C. Circuit case- Repeated denials without prejudice, FERC found no waiver, D.C. Circuit affirmed, petition for cert. filed at SCOTUS in early January.

- Two amicus briefs in support- coalition of NHA/NWHA and another by natural gas interests.
- Both cases only deal with 1-year requirement. Do not address breadth of state's authority.
- Low likelihood that Court will grant cert. in either case merely because SCOTUS only hears 100 cases a year and must make tough choices. Both cases lack clear circuit split. But trying to show this is an issue of national importance.
- 401 rule- US Supreme Court issued stay pending appeal of Trump rule. Ninth Circuit reversed district court's order vacating rule without finding rule was legally flawed, which leaves Trump rule in place for the time being. Case could go into briefing on the merits of the rule or may be remanded to EPA.
- o Once Biden rule is finalized, it will be challenged.
- There may be merit to defending the Trump rule to keep it in play as long as possible.
- Legislative reform of Section 401 is a political third rail and not likely to be included in permitting reform package.
- Current level of funding for legal effort of \$75,000 is probably sufficient through calendar year because bulk of litigation will occur in 2024.
- Malcolm thinks we should be a party to litigation on Biden rule- elevates our role and gives us standing to appeal.

Item 17 - Advocate: May 9 Advocacy Day in Washington, D.C.

- Brittney May presents on NHA's plans for Advocacy Day.
 - Using Advocacy Associates to help schedule meetings for members. Link on registration page.
 - o Tiger teams- specific to NHA's legislative priority (tax, licensing, etc.) based on zip code to determine which representative you'll meet with.
 - Reception on the Hill on Monday night for Board members, CEO Council, and deep dive members.

Item 18 – Connections: Waterpower Week, Clean Currents, and Regional Meetings

- Francesca and Joseph share plans for WPW on May 8-10, 2023 in Washington DC:
 - DOE Collegiate Competition with Marine Hydrokinetic and Hydropower starts on Sunday and continues through Tuesday with poster presentations.
 - Homework for Board members: Francesca asked Board members to go to collegiate pitches and talk to students.
 - Francesca posed idea of setting aside time for interviewing students on Sunday during lunch? May be better to send resumes in advance so interviews can be set up in advance. DOE is expecting people to show up to the collegiate event.
 Francesca asked for Board members to attend collegiate activities.
 - o Buddy system for first-time attendees of WPW- Francesca took volunteers.

Item 19 - New Business

- Hydro Foundation sub-working group (Jeff, Chris R., Dave Culligan, Thomas, and Marla).
- Grid at risk theme- cross currents in PNW, cliff of upcoming relicensings, grid reliability.
 Need other firming resource to offset wind and solar, and hydro is most affordable of those
 other resources. DOE should take lead on messaging that we can have a 100% carbonfree grid but it won't all be cheap renewable power- blended cost including firming
 resources. Should NHA pull together coalition to send this message to FERC, NERC, state
 PUCs, etc.?

- Rep. Bonamici dear-colleague letter on WPTO funding is coming out. Ask others to sign on.
- Thomas- FERC license order on financial assurance for Georgia project. Note reopener is being included in many FERC orders.

Item 20 - Executive Session

- Thomas made a motion to go into Executive Session, Chris R. seconded.
- Jeff- update on Will's replacement. Actively seeking candidates. Interviewing candidates this week- bad timing in calendar, not a lot of resumes.
- Bracewell team- scope of work in place to focus on IRA implementation and enactment of tax items on the Hill. Re conflicts of interest- we also have a contract with SMI and Troutman on lobbying efforts.
- Chris R. moved to come out of Executive Session, Jeff seconded. All approved.

Chuck moved to adjourn meeting, Heidi seconded.

Board Meeting ends @ 11:56 AM Eastern

Day 2 Action Items:

NHA to circulate Suzanne's slides from today's presentation.

Suzanne/NHA to reach out to Sara Gonzalez-Rothi (on water issues) and Stephanie Harding (on land issues) at CEQ. Both have connections to hydro.

Attendees:

Executive Committee

Mike Haynes Thomas St. John Sharon White

Pam Sullivan Jay Anders (Past Chair) Jim Hancock (General Counsel)

Board Members

Carl Atkinson Suzanne Biddle Suzanne Grassell Scott Hennessey Randy Herrin Suzanne Grassell Sarah Kulpa (Advisory)

Jeff Leahey Joel Ledesma (Advisory) Chris Mattson

Alan Michaels Megan Nesbitt Dan Petcovic (Advisory)

Romain Pellegrino (Advisory) Chris Rousseau Chuck Sensiba Mary Gail Sullivan Justin Trudell Eric Van Deuren

Heidi Wahto

NHA Staff/ NHA Committee / Council / Task Force Representatives

Marla BarnesFrancesca Blanco HadjimichaelJeremy Chase-IsraelLeRoy ColemanKimberly CostnerMarycella DumlaoChris HayesAnthony LauritaJoseph LoSassoBrittney MayMichael PurdieKelly RogersCatherine RyanMalcolm WoolfPaul Gay

Matt Allan

Other

Eric Glantz (Marcum) Linda Church Ciocci (Hydropower Foundation)

[Note: 20 of 20 voting Board members were present (MG flight delayed, joined late), representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Eastern.]

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Board Meeting starts at 8:30 AM Eastern – Mike shares a safety moment.

MAY 8, 2023 MEETING SUMMARY NOTES

Item 1 – Consent Agenda / General Updates

- Mike Haynes notes the Consent Agenda Items are listed in the Board Book, including the updated Committee and Council report.
- Randy makes motion to approve consent agent; Heidi seconded. Motion passed.

Item 2 - CEO Report on Key Activities

- Malcolm introduces new NHA team members, presents CEO report, shares updates on progress made on NHA's 2023 Strategic Priorities and the Uncommon Dialogue. Details are provided in the Board Book.
 - New NHA Staff members: Matt Allan joined NHA as new Legislative Director on April 18.
 - Uncommon Dialogue- successfully won joint DOE grant proposal, ~\$150,000 for NHA beyond budget for 2023, expect expanded Work Group activities.
 - NHA by the numbers 2022 and NHA Staff Responsibility List in Board book.

- Virtual Board meeting likely to be held in July to set 2024 dues and conduct midyear review of budget priorities.
- Some key topics discussed include:
 - Advocacy topics: hydropower reform package in the mix, new manufacturing initiative, Advocacy Day- over 100 Congressional offices scheduled.
 - Connect topics: 570 people registered for WPW- record registration and robust agenda, on path to scaling Advocacy Day, partnering with DOE's collegiate competition. Over \$1.3 million already raised for Clean Currents. Record attendance at Midwest Regional Meeting in Wisconsin. NE regional meeting July 25-26, Alaska meeting in September, already exceeded annual sponsorship targets.
 - o <u>Inform</u> topics: participation in committee and council meetings (30 member meetings were held in January to March 2023); membership grown to over 300; Follow the Money webinars have attracted high attendance, starting to expand NHA's technical offerings, about to launch OpEx reimagined, Digital Media Campaign in NE, SE, and Midwest, NHA has raised almost \$600,000 for this effort; Powerhouse and Playbook reach over 7,000 weekly.
 - Implement: Strong Q1, 87% of budgeted revenues already received; clean audit with one recommendation; membership at all-time high and growing; fully staffed with no open positions and 3 summer interns.

Item 3 – Treasurer's Report

- Thomas St. John presents the Treasurer Report. No slides presented but data is provided in the Board Book. Some highlights include:
- End of Q1 financial position is strong. Revenues are up across the board.
- Expenses are currently under budget but will pick up for events.
- Membership- numbers are strong, continue to gain members, member retention is positive.
- Policy Advocacy- revenue growth from Deep Dive policy team and Powerhouse Sponsorships.
- Clean Currents- brought in 60% of budgeted revenue through March 2023. Room for growth on sponsorship opportunities.
- WPW- with students, registration will break 600 this year.
- Investments are down across the board, only 18% of NHA's financial assets are invested. Liquid assets up since 2022 (note change in financial report- should be up not down)
- Revenue from regional meetings has increased, at 95% of budgeted revenue through March.
- Powerhouse has recognized 71% of its revenue.
- Marla presented on membership status. NHA membership is at an all-time high- 316 members currently. 19 new members this year alone. Bechtel joined NHA a few weeks ago.

Item 4 – Auditor's Report

- Eric Glantz with Marcum presents results of recently completed 2022 audit. See the Board book for the final 2022 audit report.
- Eric presented slides- NHA to distribute slides to Board (Action item- Kimberly to circulate).
- Marcum issued clean opinion on financial statements.
- Assets totaled \$4.6 million and increased \$327,000. Liabilities totaled \$2.4 million and increased \$326,000. New lease accounting standard requires capitalizing lease assets and

- liabilities. Net assets totaled \$2.2 million and increased \$1,000. Operating revenue and support totaled \$6.2 million and increased \$351,000. Operating expenses totaled \$6.2 million and increased \$1 million due to program services and supporting services.
- Natural expense fluctuations on the Statement of Functional Expenses- payroll and benefits increased, consulting increased, meetings and travel expenses increased, loss from termination of operating lease.
- One significant deficiency- revenue from media campaign- unique accounting treatment on contributions (not earned revenue).
- Jeff makes motion to approve audit, Pam seconded. All approved.

Item 5 – 1+1 = 3: NHA-Hydropower Foundation Coordination

- Linda Church Ciocci, president of the Hydropower Foundation, shares the latest from the Foundation and our continuing efforts to leverage each other's work.
- NHA provided funding to Foundation, which will be used for workforce activities.
- Mission is to promote research, education, and dialogue. We are the educational arm of this association that can't be done by NHA.
- Lost funding from DOE on workforce development. NHA does all training for current hydro industry, anything outside of that (colleges, trade schools) is within Foundation's purview.
- Thinktank Program- reimburse students to attend hydro activities, one in Alabama and one
 in NW at Grant PUD coming up. Majority of students who participate will work in hydro
 industry.
- Career fair at NWHA.
- Programs are too limited in nature and require funding.
- DOE does not have a dedicated workforce program and this is worrisome.
- Hydropower Collegiate Competition- 150 students in attendance this week. Foundation will be organizing another competition in 2024.
- We are sub-recipient of DOE Uncommon Dialogue grant.
- We are not a membership organization, we are partners with NHA.
- Jeff- IIHA funding requires community benefits plans, pitch for companies to support Foundation as part of this requirement.
- Chris- Mike Manwaring leading charge on joint collaborative/task force of NHA and Foundation Boards and how to support each other. Have had a couple of meetings.
- Malcolm- NREL spent \$600,000 on collegiate funding this year, it is a big effort. More than 25 schools participated. Need to do more to get more funding for this, but it is not infinite. Need more ideas on how to continue funding and promote participation.

Item 6 – Effort to Grow U.S. Hydropower Manufacturing

- Anthony Laurita and Chris Hayes present an update to the Board on NHA's new effort to collaborate with the U.S. Department of Energy to attract major new investment in U.S. based hydropower manufacturing.
- Malcolm- Alejandro at DOE asked how to get Secretary Granholm to promote hydropower, he said focus on manufacturing. Secretary wants jobs and factories in the United States. This triggered this initiative.
- We have created a survey for asset owners, sent out in mid-April with deadline of May 15, unique opportunity to drive costs down, increase quality, and address workforce challenges.
- Anthony asks Board members to fill out survey and circulate within companies. Action item.
- DOE roundtable on manufacturing at WPW. Invitation only event.

• Malcolm hopes to get recommendation to White House by end of summer to get funding to make something happen.

Item 7 - Getting Ahead of the Methane Whack-a-Mole Game

- Anthony Laurita provides update on NHA's efforts to address allegations attributing
 methane emissions from reservoirs to hydropower facilities, including petitions to the EPA
 and FTC, comments to WRI's GHG Accounting Protocols, and in individual relicensing
 proceedings.
- Malcolm- seed being planted in multiple contexts could be an existential threat to industry. Need to be zero carbon for funding opportunities. There may be methane emissions from reservoirs but it has nothing to do with running water through turbines for hydropower generation. Not the message coming from other corridors.
- Anthony- Patagonia has filed a petition for rulemaking with EPA, articles in publications.
 NHA has been responding, taking science-based approach on methane emissions, distinguishing between emissions from waterbodies and those with hydropower operations.
- NHA has developed a white paper with hydropower context to share on Hill, new DOE
 research published by PTO that categorically denies these claims, we've been working with
 NGOs on joint fact sheet just finished- sent to Deep Dive Policy Team and Uncommon
 Dialogue WG4 for feedback and sign on. Anthony asks Board for other ideas on how to
 respond to this issue.
- Hydropower Reform Coalition has put out fact sheet and circulating it on Capitol Hill alleging there are emissions from hydropower operations.
- Carl- NYT released article last week that was positive on pumped storage, at end of article
 it discusses GHG emissions directly tied to hydropower. Clear threat to industry, need to
 think about how to get in front of it. Malcolm wrote letter to editor to respond- not yet
 published.
- Jim- HRC also getting involved in licensing proceedings, getting people to run models in reservoirs and file at FERC to be included in cumulative effects analysis in NEPA documents.
- Malcolm- DOE did its own analysis, released study a week ago, doesn't give clear quote
 that says no emissions from hydropower. NHA will send link to new DOE website giving
 summary of NREL study on hydropower emissions- Action item.
- Scott- EPA, DOE, and Treasury will decide what technologies qualify for tax credits. We should focus our efforts there. Malcolm noted that EPA has no obligation to respond to Patagonia petition.

Item 8 – Re-Imagined Op-Ex is Here!

- Anthony Laurita presents re-imagined Op-Ex system and requests feedback on how best to roll it out to the NHA membership.
- Log-in to Op-Ex through hydro.org.
- NHA worked with software company to create Op-Ex 2.0. It is up on NHA's website and running. We have a tentative campaign to get word out by end of May- will have an NHA seminar and an official launch.
- Chris working on Lunch and Learn series. Will have a video library of these on Op-Ex website.
- Carl- only thing missing with Op-Ex website is conversation on these topics. Would like to find a way to incorporate that in NHA events- quick forum or coffee talks to highlight recent

- entries and take feedback from industry to improve it. Even a workshop on how to submit an Op-Ex report.
- Eric VD- tie in HTC efforts into video library. Suggest NHA host Webex calls with asset owning members on how to post a report, it increased PG&E's usage of website significantly. Chris and Anthony will work on this. Could also present on this during committee calls.

Item 9 – Follow the Money – Update on Infrastructure and IRA Implementation

- Mike Purdie updates the Board on implementation of DOE grant programs, other federal funding opportunities, provide the latest from Treasury on IRA implementation, and leads a discussion on whether NHA should hire specialty tax council to seek Treasury guidance on application of the "80-20" rule to hydropower refurbishments.
- 242 apps due today for new generation at existing facilities.
- June 20th apps due for 243 program. Community development plans
- 247- \$553 million- expect final guidance document to be released today.
- DOE web portal for applications creating some problems.
- Agencies very motivated to get money out the door.
- IRA- Treasury Guidance on domestic content is imminent. Direct pay and transferability guidance will be next.
- Clean Fuels Credit (Hydrogen Production Tax Credit)- companies should be able to take advantage of this credit. Based on fuel-based life cycle emissions.
- 45X program- advanced manufacturing production credit. NHA's comments were that
 pumped storage and batteries should be included in credit. 45X guidance not expected
 until end of year, but Jeff hears there is a draft document circulating at Treasury and OEMs
 have been brought in to discuss it.
- 80-20 repowering- wind industry as part of PTC has this- if you replace 80% of book value of wind farm, get to count as new asset under tax program. Could we get 80-20 rule for hydro at Treasury- claim tax credits for replacing large equipment like turbines, rotors, stators. We are at front end of this- gathering interest and how to bring this to Treasury. It would be a six-figure undertaking for NHA to advocate for this. NHA will solicit industry interest and consider putting it into next year's budget.
 - Eric VD- need to first ascertain 80% of what- a turbine isn't 80% of a hydro asset.
 Could be significant.
 - o Thomas- suggest creating a one-pager or position paper on this before passing the hat to solicit member interest. NHA will ask Bracewell to prepare this- Action item.

Item 10 - Legislative Updates

- Matt Allen and Brittney May provide an update on NHA's progress to date on its top
 legislative priorities, including licensing reform, tax support for the existing fleet, and federal
 appropriations to fund hydropower and marine energy research, development,
 demonstration, and deployment by DOE's WPTO.
- Licensing reform bill- we are very close, targeting tomorrow to introduce licensing reform package in the Senate. Working through a few last-minute issues with environmental groups. Goal to be included in broader energy permitting reform package.
- Working to pass 30% ITC for existing hydropower fleet including dam safety and
 environmental upgrades. IRA provided tax credits for new generation and pumped storage
 but not existing fleet. This remains an NHA priority. Cantwell and Murkowski are
 committed to moving tax credit in this Congress. No timetable for a tax package right now,
 but we want to be included in next tax package whenever it is introduced.

 Appropriations- FY 2024 process is well underway. NHA submitted annual statement to the record to House and Senate subcommittees with recommendations on annual WPTO funding. Presidential budget request included \$15 million cut in marine energy funding- we will be fighting against that. NHA will be doing Hill visits with appropriations reps tomorrow.

Item 11 – Clean Water Act 401 – Regulatory and Litigation Update

- Chuck updates Board on litigation over the legality of the Trump-era 401 rules, preview the Biden Administration's new rule, and flag the potential need for additional litigation in the coming year.
- Waiver cases- NHA submitted amicus briefs to U.S. Supreme Court in TID/MID case. Certiorari petition was denied so D.C. Circuit ruling on denials without prejudice stands. NID/Yuba cert. petition on withdraw and resubmit from 9th Circuit- NHA submitted amicus brief to Supreme Court, expect court to consider case on May 12. Odds are not in our favor. Legitimate question whether Hoopa ruling actually has any life in it or not. Courts are limiting case to its facts. FERC brief in Yuba case limited case to its facts with very little precedential value. Denials without prejudice are condoned, so why would state require applicant to withdraw and resubmit?
- 401 rule litigation- NHA has been leading party in N.D. California case in support of Trump era rule. Case is back at district court. Case will be dismissed without vacating the rule. Trump rule will remain law of the land until new Biden rule becomes effective. New Biden rule expected soon. Rule not yet submitted to OMB- that process can take 60-90 days. Then OMB rule will be published in Federal Register and should take effect 60 days after publication. Soonest we will see new rule become effective is 4-5 months from now or longer. Industry will then need to decide whether to challenge new Biden rule.

Item 12 – "More Than Just Clean Energy": Next Steps for NHA's Digital Media Campaign

- LeRoy presents a high-level overview of NHA's plans to build on its digital media campaign in the Southeast and Northeast and seeks feedback on the proposed theme of "how hydropower complements other variable renewables."
- Preparing to launch a new ad campaign for 2023 in Northeast, Midwest and Southeast. We are developing the ad and gathering feedback.
- Suggest getting feedback on ad from collegiate students.

Item 13 – Leveraging Waterpower Week in Washington

- Marla and Francesca present on how best to leverage activities during WPW week.
- 583 registrations as of time of Board meeting.
- Advocacy day- 20% of attendees are participating. 90 Congressional offices will be visited.
 298 total meetings.
- Reminder to sign up for meetings with agencies.

Item 14 - New Items for the Board

• July meeting might be in person in DC with hybrid option. TBD.

Item 15 - Executive Session

- Mike Haynes made a motion to go into Executive Session, Thomas seconded.
- Malcolm's 5-year contract expires in July 2024, with option to extend. Board will entertain a motion to extend the contract at the July Board meeting.
- Hydropower Foundation- bring Mike Manwaring back at July Board meeting to provide an update on status of joint effort.

• Mike Haynes moved to come out of Executive Session, Jeff seconded. All approved.

Mike Haynes moved to adjourn meeting, Alan seconded.

Board Meeting ends @ 12:04 PM Eastern

Action Items:

NHA to circulate Marcum slide deck on financial audit to Board members

Board members should fill out hydropower manufacturing survey and circulate it within their companies by May 15. Anthony will re-circulate the survey link.

NHA will circulate link to new DOE website giving summary of NREL study on hydropower emissions.

NHA to ask Bracewell to prepare one-pager on application of 80-20 rule to hydro to help solicit member interest.

Attendees:

Executive Committee (virtual if noted)

Mike Haynes Thomas St. John Sharon White (virtual)

Pam Sullivan Jay Anders (Past Chair) (virtual) Jim Hancock (General Counsel)

Board Members (virtual if noted)

Carl Atkinson
Suzanne Biddle
Scott Hennessey (virtual)
Alan Michaels (virtual)
Chris Rousseau (virtual)
Suzanne Biddle
Randy Herrin
Sarah Kulpa (Advisory) (virtual)
Chris Mattson (virtual)
Megan Nesbitt
Dan Petcovic (Advisory)
Chuck Sensiba
Mary Gail Sullivan (virtual)

Eric Van Deuren Heidi Wahto (virtual)

NHA Staff/ NHA Committee / Council / Task Force Representatives

Marla Barnes Francesca Blanco Hadjimichael (virtual) Jeremy Chase-Israel (virtual)

Marycella DumlaoChris HayesAnthony LauritaJoseph LoSassoBrittney MayMichael PurdieKelly RogersCatherine RyanMalcolm Woolf

Susie Reynosa (NHA intern) Matt Allan

Other

Katia Debian from GE Deb Mursch (GE) Rick Miller (HDR)

Mike Pederson

[Note: 19 of 20 voting Board members were present, representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Eastern.]

Notes follow the Board meeting agenda (Item #) included in the final Board Book, unless noted.

Board Meeting starts at 1:30 PM Eastern – Mike shares a safety moment and reads anti-trust statement.

JULY 17, 2023 MEETING SUMMARY NOTES

Item 1 - Consent Agenda / General Updates

- Mike Haynes notes the Consent Agenda Items are listed in the Board Book, including the updated Committee and Council report.
- Eric VD makes motion to approve consent agent; Randy seconded. Motion passed.

Item 2 – CEO Report on Key Activities

- Malcolm presents CEO report, shares updates on progress made on NHA's 2023 Strategic Priorities, staffing update and the Uncommon Dialogue. Details are provided in the Board Book.
 - Staff update: hiring for new director of Media Affairs, LeRoy has moved on. Kelly leading efforts on National Hydropower Day, Jeremy leading communications to industry and media, Malcolm leading digital media campaign.
 - Uncommon Dialogue: conversations continue, grant money now available, 3 pieces of legislation now endorsed by Uncommon Dialogue; DOE grant for \$3.7 million over 2 years to be spread among 12+ groups and should accelerate discussions, NHA to receive

- ~\$600,000; NHA will continue to engage on UD workgroups with industry co-chairs and NHA committees/councils, more industry participation needed in working groups.
- Hydropower Vision Roadmap survey- need more industry participation, open through Friday, NHA to send out to its members (Action item).
- Some key topics discussed include:
 - Advocacy topics: hydropower reform package introduced in House and Senate, tax bill seeking 3rd Senate Republican on Finance, DOE 240 applications submitted, meeting with Treasury/IRS on Thursday re "Domestic Content."
 - <u>Connect</u> topics: WPW- record participation, great partnership with collegiate competition, Advocacy Day. Clean Currents- \$1.5 million already raised, 187 exhibitors already confirmed. Record attendance at Midwest Regional Meeting in Wisconsin. NE regional meeting July 25-26.
 - Inform topics: participation in committee and council meetings spiked in April and May, uptick on technical side due to Chris' monthly technical programs; OpEx new site is open; "Clean Living" Digital Ad Campaign moving forward in NE, SE, and Midwest; Powerhouse and Playbook reach over 7,000 weekly.
 - Implement: Strong financials thru May, collected 92% of budgeted revenues already received; memberships at 328 organizations (record high) including 24 new members and 5 dropped members.

Item 3 – Treasurer's Report

- Thomas St. John presents the Treasurer Report. No slides presented but data is provided in the Board Book. Some highlights include:
- NHA in strong financial position, has collected 92% of budgeted annual revenue and incurred 28% of annual budgeted expenses to date.
- NHA's cash position remains strong with over \$1.5 million held in the operating account.
- Clean Currents- reminder to register.
- WPW great success, \$88,000 above estimated revenue
- Investments have been relatively flat, only 18% of NHA's financial assets are invested in equities.
- Dues increases for next year- to be discussed later in agenda.
- Marla presented on membership status. See membership update on page 15 of Board book.
 Clean Currents and addition of operational/technical expertise has drawn in more members.

Item 4 – Allocating Uncommitted NHA Funds

- Malcolm presents recommendations on how best to allocate uncommitted 2023 funds to maximize value for NHA's membership and return the organization to compliance with the Board policy of maintaining liquid assets (reserves) of 6-12 months.
- NHA currently forecasts ending CY 2023 \$377K ahead of budget. No obligation to spend excess but asking for Board guidance on options for how to spend it.
- NHA Staff recommendations: \$132K for NHA salary/bonus pool to keep up with inflation; \$100K for pumped storage/external strategic engagement staff position and to engage with external groups; \$50K for NHA Digital Ad campaign to reach more audiences; \$50K for Trump Administration 401 litigation expenses already incurred.
- Eric: something to think about- requests to fund new staff position should consider funding for future years. Malcolm- \$100K covers salary, benefits, and costs to attend meetings through end of 2023. Need to build future year costs into budget.
- Need to consider messaging associated with dues increases when NHA has excess funds.

- Strong support for funding NHA salary/bonus pool.
- Questions on whether Board needs to approve these expenditures or only do a budget amendment. Board agreed to take vote to increase top line by \$277K.
- Pam makes motion to increase top line by \$277K; Eric VD seconded. Motion passed.

Item 5 – Establishing 2024 Dues

- Thomas recommends to maintain 5% dues increase with opt-out option to keep up with inflation.
- Board comments:
 - NHA starting to deliver a lot more value and programming, might consider a more modest dues increase but encourage members to increase participation in NHA initiatives.
 - o Recommend slow and steady rate increases of 3-5%.
 - We should consider different grading scales so we don't price out certain potential members.
 - o 5% is very reasonable to keep up with inflation.
- Pam makes motion to approve dues increase of 5%; Suzanne Grassell seconded. Motion passed.

Item 8 – Defining Domestic Content Under the Inflation Reduction Act

- Inflation Reduction Act creates a 10% adder to the Production Tax Credit or a 10 percentage
 point adder to the Investment Tax Credit for taxpayers who have projects that satisfy the
 requirements for the "Domestic Content Bonus Credit," as defined under Treasury/IRS Notice
 2022-38. See Mike Purdie's June 30, 2023 memo to Deep Dive Policy Team for background.
- Treasury issued guidance for wind and solar industry and punted for hydro, asked NHA to meet
 with it to revise the guidance to include hydro. Real opportunity for NHA to shape definition.
 NHA has been working with its members and the Deep Dive Policy team to develop a consensus
 approach.
- Mike Purdie provided overview of NHA's recommendations re on-site manufacturing. Some level
 of on-site work should be included in domestic content calculation, but not meant to be all
 inclusive. Work performed by OEM on generator and in some instances the turbine should be
 included.
- Treasury needs feedback on three topics: What is on-site manufacturing?, component vs. subcomponent, cost or price.
- Rick Miller provided engineering perspective. High level message- need to educate DOE that hydro is different than wind and solar, some manufacturing occurs on site. Hydro equipment is not like a solar wafer.
- Shouldn't be too specific on which components are manufactured on site. If overly restrictive, it could trigger waivers.
- Carl- If turbine and generator are manufactured components to qualify for 40-55% incentive threshold and they reject on-site manufacturing, where is industry then? We would need to build everything in the US.
- Address on-site manufacturing as a distinct issue. Don't get into the details.
- Manufacturers price vs. cost to taxpayer: recommendation is that calculation should be based on price end user incurs for these components rather than manufacturer's cost. This recommendation is in alignment with other trade associations. We don't know what manufacturer cost is, only the price we pay.
- Mike moves to authorize NHA to introduce this as a topic of conversation with Treasury.
- Documents sent to Board on July 14 will not be provided to Treasury yet but will be used as a source of talking points.

- Consensus for Treasury meeting: price vs. cost, on-site manufacturing should be included for domestic content calculation. Note to Treasury that for component vs. sub-component issue we are still looking at issue within the association.
- Malcolm- two areas of consensus- price over cost, some on-site manufacturing activities for hydro should be included. Ask Treasury if they are still using the table- other trades don't like it.
- Mike Haynes moves for approval of price over cost and that some on-site manufacturing activities should be included in the domestic content calculation. Randy seconded, Alan thirded. Motion passed.

Item 6 – Legislative License Reform Outlook

- Matt Allen provided an overview of the WPW Advocacy Day.
- Matt provided an overview of the provisions of the House and Senate licensing bills that have been introduced – substantive provisions, cosponsors, etc.
 - Senate ENR Subcommittee will include UD bill in a hearing that will be held on Wednesday this week.
 - o Looking for another D to pair with Sen. Crapo who wants to join as cosponsor.
 - Likely vote in September or later in fall
 - If both bills pass through both chambers, there will be a negotiation on conflicting provisions.
 - Matt talked about the prospects for passing licensing reform easier if able to get in a larger permitting bill as opposed to on its own.
 - We have been participating in Uncommon Dialogue process. Trout Unlimited and Nature Conservancy have concerns about provision on Section 18.
 - Chuck- on fish passage, agency would impose prescriptions that must be tied to project-level effects. TU and NC are concerned about this provision- it is not about project effects but giving agencies full authority to require fish passage where it is deemed necessary.
 They indicated that there is no evidence that Section 18 is a problem.
 - Action item: Asking members to provide egregious examples of Section 18 fishway prescriptions- for example, agencies want to move fish to areas where they never were historically.
 - o Action item: NHA has drafted letter of support template for S.1521, asking for individual letters from NHA members or email your Senator to ask them to cosponsor the bill.

Item 9 - NHA's Digital Ad Campaign

- Draft new ad was previewed for the Board. Some tweaks will be needed. Board provided feedback. Action item: NHA Board to send digital ad to their comms staff and provide feedback.
- Board spent \$300K last year, funded around \$300K for this year for NE, SE, and adding Midwest this year.
- Commercial to run in September/October.
- Suggest debuting the ad for National Hydropower Day if possible.
- Discussion about fundraising for 2024: NHA can't continue to pass the hat to fund the initiative.
 Currently spending \$200K per region. Next year if we don't pass the hat, hoping NHA can
 contribute \$300K and do one region or stretch to cover 2 regions. Some companies are willing to
 contribute. If asking for contributions, need to include opt in with NHA dues invoice- can't be a
 separate invoice.

Chuck moved to adjourn, Meg seconded. Meeting adjourned at 5:25 pm Eastern.

JULY 18, 2023 MEETING SUMMARY NOTES

[Note: 19 of 20 voting Board members were present, representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Eastern.]

Notes follow the Board meeting agenda (Item #) included in the final Board Book, unless noted.

Board Meeting starts at 8:32 AM Eastern.

Item 12 - DEI Moment: Leading Our Industry to Look More Like Our Customers

- Brainstorming for nominations for Board nominees to increase diversity on Board.
 - Last year's efforts to increase more diverse applicants:
 - Invited candidates to dinner at Clean Currents so Board could meet them. We will do that again.
 - After slate was chosen, we asked candidates to record a video at Clean Currents so we aren't just voting based on a name.
 - Affirmatively recruit diverse candidates using our own networks.
 - Other ideas for this year: encourage applicants to keep trying, personal outreach to prior applicants.
- Chris Nichols, Executive Director of Renewables Forward. "Thriving in a New Business Era"
 - Community engagement is an important part of DEI
 - More than 1 million new workers needed in the clean energy industry by 2032. Need an equitable workforce. Need to work collaboratively to ensure diverse candidates.
 - Renewables Forward's framework principles: assess DEI in our industry to raise awareness, develop and share corporate practices and policies, create a more diverse and inclusive pipeline of candidates, and invest in the under-resourced and minority communities in which we work.
 - Renewables Entrepreneur-Executive Partnership (REEP) Program- pairs executives with women and diverse-owned start-ups with training and support. NHA could use this program to increase diverse Board candidates.
 - NHA is a member of Renewables Forward and is entitled to its services. Looking for feedback on how we can help NHA.

Item 11 - Raising the Industry's Ambition

- DOE loan office has never given money out for hydropower.
- Why are we funding offshore wind when we could refurbish hydros?
- Does the industry need to raise its ambition? Is the criticism fair?
 - General agreement that criticism is fair.
 - Every time we try something outside the box, limited by license and compliance obligations. Conservative industry is limiting.
 - o Hesitation to try new innovations because asset owners are risk averse.
 - Can't access funding that is available for solar and wind for needed upgrades.
- Energy planners- IRP planners, how do they treat hydropower? Should we try to engage with different people in industry in a different corporate side that aren't considering hydro?

- TVA works with energy planners and its models include pumped storage. Models don't consider ancillary services because there is no market value in our area for those services.
- Valuation question
- o If there is an organization for IRP planners, we could engage to raise the issue.
- o Could there be an influencer-led discussion to change view of federal and state agencies?
- People assume hydro plants will be around forever.
- Looking for new product at NYISO for intermittency and spinning up and down multiple times a day which causes damage to our system and plants are entitled to be paid for it.
- Hydropower industry is structurally out-gunned at RTOs. Many IOUs are diversified.
 Strategy has shifted to influence thought leaders like FERC and NERC that hydro is needed for reliability.
- Hydro is industry that takes no for an answer. Need to find a way to take what you have and take
 it to a new level. Must break through glass ceilings. Technical innovations aren't our problems.
 More environmental and operational regulations where hydro has said things are too hard to
 change. Need to change rules limiting what hydro plants can do.

Item 13 - Bipartisan Infrastructure Law

- Jeff Leahey provided a status update on Section 242/243/247 programs.
 - Section 242 Production Incentives. Applications were due in May, awards will be issued in the fall. DOE has 6-7 years of full funding for this program- need to make members aware that this funding is available.
 - Section 243 Efficiency Improvements- applications due in June, DOE will issue awards in the September/October timeframe. There were many applications and funding may be depleted this year.
 - Section 247- letters of intent were due in June, applications will be due in October.
 Awards will be in Q1 2024. Many LOIs were received. May be oversubscribed.
- Anthony provided an update on other BIL funding. NHA has held several well attended webinars
 on these funding opportunities. Another scheduled for August 9 with NOAA and USFWS to
 discuss non-targeted funding for hydro. See memo prepared by Anthony on hydro.org under
 resources tab for more information on funding sources. NHA will re-circulate list of funding
 opportunities (Action item).

Item 14 – Incentivizing Refurbishments: Application of Treasury's "80-20" Rule to Hydropower

- Malcolm provided background on 80-20 rule, how it has been used in the wind industry and how it can be impactful for the hydropower industry. If you repower a facility and more than 80% of facility is new, qualify for purposes of PTC. Repower every 10 years to get the credit. Hydro has never been able to take advantage of credit because they are multi-purpose facilities.
- NHA has reallocated \$ in budget for this and has issued an RFP for tax counsel.
- Mike highlighted a table that Bracewell put together in Board book with 5 options to promote at Treasury and walked through the options. Options 1-2 are the most realistic.
- Had a kick-off call last week to discuss. Asking DOE to educate Treasury on hydropower. Asked members to tell NHA about its investment plans.
- Get your tax experts engaged in this issue.

- Need guidelines on how fair market value is calculated for purposes of 80-20 rule. For older plants, FMV may be negative.
- Component vs. whole facility is 80%. Don't want to be limited to replacing 80% of a facility.

Item 15 – NHA's "3R" Tax Proposal to Maintain Existing Hydropower and Pumped Storage

- Matt gave an update on the Cantwell Murkowski bill. Seeking a third Senate D member to pair with an R as an original co-sponsor.
- NHA working on a House strategy. Met with House W&M R staff. Heard our proposal was inoffensive (high praise). House Rs would not oppose. Also met with Leader Schumer's office.
- Trying to get bill introduced as soon as possible. Optimistic we will be included in larger tax package.
- Given massive tax bill in last Congress, not a strong appetite for doing anything on tax in this Congress. We are saying this is about infrastructure, safety and environmental, not energy.

Item 16 - Reinvigorating NHA's Technical Programming

- Chris Hayes provides update on HTC.
- Activities launched since March 2023: lunch and learn series, building technical depth via member engagement, benchmarking opportunities (operations/water quality).
- Asset Owner forums (1x per quarter): CDSE Roundtables (June 15, July 28, October 10), O&M Asset Owner forum (July 18, October 13), Senior leaders (May 19, October 13)
- Training opportunities provided: two hydro academy workshops held at WPW, May 18 meeting
 with FERC D2SI- 200 people attended, 80 asset owners, recorded and posted in Opex video
 library, lunch and learns, Clean Current workshop offerings.
- Educational Opportunities: what is the gap?
 - Several influencing factors: aging workforce and assets, erosion of technical expertise, new technologies, changing grid, budget constraints.
 - Need for professional development/continuing education hours
 - o Formal and proactive wide-ranging hydro 101 course
- Why is NHA uniquely positioned?
 - o Access to NHA membership base, 1-stop shop/360-degree coverage
- Next steps: establish advisory board to work on overall concept, develop curriculum, budgeting and fee structure over next couple months and come back in October with detailed plan for approval. Volunteers for advisory board- Sarah, Heidi, Meg, Chris Mattson, Eric, Thomas, Pam.
- Marla noted that half of exhibitors at Clean Currents are not NHA members and may participate in training.

Item 17 - Rolling Out Op-Ex Reimagined

- Chris and Anthony walked through new version on NHA website, discussed messaging, roll-out schedule, event report submissions.
- Reports cover maintenance, safety, operations, and environmental reports. Contains over 1,100 lessons learned and corrective actions. Human performance was a factor in 48% of the events.
- Jim Miller is under contract with NHA and assisting with Opex initiative
- Received 25 submissions in CY 22. 10 from PG&E. Only 9 reports received thus far this year.

 Roll out: June lunch and learn, use Member Playbook and committee meetings starting in August, webinar tutorial to demonstrate tool will be held.

Item 10 - U.S. DOE Manufacturing Supply Initiative

- Chris made presentation on manufacturing supply initiative.
- NREL and DOE draft report to be issued in August on Demand and Manufacturing Gap Analysis.
 - Includes domestic production capability discussion including supply chain analysis, turbine manufacturing, transformers, generators, and what makes hydro unique re transformers and generators.
- Final report expected by end of FY. Will include discussion on benefits of licensing reform and federal fleet discussion, programs incentivizing hydro and manufacturing, potential PTC and benefits, and recommendations.

Item 18 - Methane, 401 and Other Regulatory Issues

- Methane:
 - Anthony provides an update on methane emissions. Patagonia filed petition to add methane emissions from reservoirs with EPA. NHA has been watching it. EPA NOPR was issued recently and does not mention hydro.
 - NHA has developed white paper/fact sheet related to methane and hydro. Engaged with DOE and Oak Ridge on this. Still work to be done on fact sheet.
 - American Rivers and Hydro Reform Coalition are campaigning that hydropower generations emit methane. NHA is trying to figure out if there is any truth to this by changing stratification of where methane is in reservoir and running through turbine may cause degassing in certain specific conditions.

401:

- Chuck provided update on ongoing litigation of Trump rule. Case will not move forward on merits of whether Trump rule is illegal or not but judge did not remand case to EPA. Judge will hold case to see what happens with the Biden rule. Concern that new rule will apply retroactively to all pending requests for certification in process at time rule becomes effective.
- New 401 rule still under review by OMB. Then will appear in Federal Register.
- NHA is engaging on the Hill with Senator Capito's staff to make changes to 401 program nationwide. Proposed changes focusing on state authority to impose conditions on 401.
 No response back yet.

Item 19 - NHA Events

- Location of Clean Currents in 2025- #1 choice is Pittsburgh. Francesca to do site tour next week to be sure it is suitable.
- CC 2024 is in Portland, OR.
- CC 2023: Over 180 exhibiting companies already signed up. HydroVision only had 150. There
 were 34 NHA members that exhibited at HydroVision. Support froom AMP, Duke, and City of
 Hamilton. Make reservations to come in Monday night for Board meeting dinner and will go
 through Friday.

Item 20 - New Business

- Thomas: Need to carve out time to have a deeper conversation on DEI as a group. Will plan on that in October or December.
- Renewables Forward is trying to restructure, currently financed by solar companies, but providing benefits to all industries. It wants to rebrand and have it paid by trade associations and have them sit on the Board rather than individual companies. Asking NHA to make a \$200,000 payment. NHA needs to decide if it will contribute and if so how much.

Action items:

- NHA to circulate Hydropower Vision Roadmap survey for more industry participation (open through Friday).
- Register for Clean Currents.
- Board members to provide egregious examples of Section 18 fishway prescriptions for Uncommon Dialogue discussions.
- Board members to provide letter of support for S.1521 (relicensing reform) and/or email your Senator to ask them to cosponsor the bill.
- Board members should provide mock-up of digital ad to comms staff and provide feedback.
- NHA will re-circulate list of funding opportunities prepared by Anthony.
- NHA to circulate presentations from Board call.

Item 21 - Executive Session

- Jeff moved to go into Executive Session, Mike Haynes seconded.
- Jeff moved to conclude Executive Session. Eric seconded.

Carl moved to adjourn meeting, Meg seconded. All approved. Meeting adjourned at 12:28 pm Eastern.

Attendees:

Executive Committee

Mike Haynes Thomas St. John Sharon White

Pam Sullivan Jay Anders (Past Chair) Jim Hancock (General Counsel)

Board Members

Carl AtkinsonSuzanne BiddleSuzanne GrassellScott HennesseyRandy HerrinSarah KulpaJeff LeaheyJoel Ledesma (Advisory)Chris MattsonAlan MichaelsRomain Pellegrino (Advisory)Chris RousseauChuck SensibaMary Gail SullivanJustin Trudell

Eric Van Deuren Heidi Wahto

NHA Staff/ NHA Committee / Council / Task Force Representatives

Matt Allen Marla Barnes Francesca Blanco Hadjimichael

Jeremy Chase-IsraelKimberly CostnerChris HayesJoseph LoSassoBrittney MayMichael PurdieKelly RogersEllie RubalowCatherine RyanCopeland TuckerBarbara TyranMalcolm Woolf

[Note: 19 of 20 voting Board members were present, representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Eastern.]

Notes follow the Board meeting agenda (Item #) included in the final Board Book, unless noted.

Board Meeting starts at 7:59 AM Eastern – Mike shares a safety moment.

MEETING SUMMARY NOTES

Item 1 - Consent Agenda / Updates

- Mike Haynes notes the Consent Agenda Items are listed in the Board Book, including the updated Committee and Council report.
- Thomas moves to approve consent agent; Eric VD seconded. Motion passed.

Item 2 – Hydropower Foundation Update

- Linda Church Ciocci updates the Board on Hydropower Foundation activities.
- The Foundation has recently updated its mission statement to focus more directly on developing potential new workers for the waterpower industry.
- Foundation filed with DOE for \$1.3 million grant- includes WC² program, student engagement program, vets for hydropower program, a mid-career professionals program, trade school program, a women's leadership program.
- Women's leadership program- women's executive training institute to bring in more diversity into C suites in industry. To be housed within the NHA Hydro Academy.
- WC² program- Student University Clubs at universities around the country, provides co-ops, internships. To be announced at the plenary session on Thursday morning. Organizing career fair at University of Cincinnati Linder College. Working with DOE to bring Hydropower Collegiate Competition students to Clean Currents.
- NHA funding for Foundation- 10k spent on welcoming session, 15k to organize career fair.

- The Foundation requests that NHA provide the same level of funding in the coming year (25k).
- The Foundation complements NHA- brings in students so NHA can train them.

Item 3 – CEO Report on Key Activities

- Malcolm presents CEO report, shares updates on progress made on NHA's 2023 Strategic Priorities, introduces new staff, and provides an update on the Uncommon Dialogue. Details are provided in the Board Book.
 - New Staff members: Barbara Tyran, Director of External Relations; Copeland Tucker,
 Director of Public Affairs; Ellie Rubalow, Events Specialist. Back up to full strength.
 - Tim Welch with DOE will be at Clean Current, hoping they will make announcement on infrastructure grants.
 - Uncommon Dialogue: grant money has been approved, \$3.7 million over 2 years (2024-25), NHA to receive \$600,000; 2023-24 election cycle- we have major pieces of legislation in Congress, people expect us to contribute on policy and politics, NHA does not have a PAC, need to support champions (Senator Cantwell is in cycle this year, Cathy McMorris Rodgers) with fundraisers.
- Some key topics discussed include:
 - Advocacy topics: hydropower license reform package- successful hearing in both the Senate and House, committee votes expected in both chambers in late October/November; tax bill to preserve existing fleet- re-introduced on 9/28, all eyes on Senate/House leadership, hoping there will be an end-of-year tax package; DOE 240 grant applications submitted, hoping for 243 announcements soon, 400 applications received for 247, DOE will rank proposals if needed; Clean Water Act 401 rule issued; IRA implementation- engagement with Treasury continues particularly on "Domestic Content" and Repowering (80/20 rule); billions more available in energy sector, NHA needs to be competing with wind and solar for that money, updated guidance document in Board book.
 - <u>Connect</u> topics: Clean Currents- \$2.1 million already raised, almost 1,500 registered, over 200 exhibitors, over 200 speakers. Waterpower Week- record participation, successful WPW Advocacy Day. Regional meetings received record attendance.
 - o <u>Inform</u> topics: participation in committee and council meetings spiked in April and May because of 240 funding announcements, up by a third in participation in committee and council meetings; new curriculum development program will boost participation; Clean Living digital ad campaign is out and live in Northeast, Southeast, and Midwest; successful National Hydropower Day. Action item- NHA to recirculate how to leverage federal funds guidance, results from Hydropower Day and Digital ad campaign (in Board book but NHA will recirculate)
 - Implement: Strong financials thru September, already met budgeted revenues from year, still receiving registrations from CC and have California regional meeting in December; membership- 343 organizations with 38 new members.

Item 4 – Treasurer's Report

- Thomas St. John presents the Treasurer Report. No slides presented but data is provided in the Board Book. Some highlights include:
- NHA in strong financial position, has collected over 100% of budgeted annual revenue and incurred 57% of modified budgeted expenses to date.
- NHA's cash position remains strong with over \$1 million held in the operating account.

- Clean Currents- to date has brought in 90% of budgeted revenue, expect to be well over 100%.
- Investments have been relatively flat, only 17% of NHA's financial assets are invested in equities.
- In the last 3 years we've made some big decisions (lease, CC, training curriculum), made wise
 decisions guided by staff leadership.
- Marla presented on membership status. Now have 343 member organizations (new record).
 Several new Alaska members. Salt River Project from Arizona has decided to join. See
 membership update on page 15 of Board book. More than half of the exhibitors at CC are not
 NHA members- opportunity to share message and encourage people to join. Over 350
 registrants at CC have never attended CC before. A dozen students at CC- Wednesday lunch
 event, Board members encouraged to attend. 13 members currently at risk.

Item 5 - Board Nominations

- Open Board Seat: to fill Jay Anders' seat through end of 2025. ExCom recommends
 consideration of current advisory members (Sarah, Romain, Joel) to fill seat. Joel prefers to stay
 advisory. Sarah Kulpa appointed to fill Jay's seat.
- 2024 Board Candidate Slate. 24 nominations. Nominations committee recommends the following 12 for Board consideration:
 - Mark Benacquisto, (UBC) Millwrights
 - o Deb Mursch, GE
 - o Gia Schneider, Natel
 - o Carl Atkinson, Voith
 - Scott Hennessey, Brookfield
 - Todd Briggeman, Black and Veatch
 - o Jason Heilman, American Hydro
 - o Kelly Larimer, Kleinschmidt
 - o Jillian Lawrence, Patriot Hydro
 - o Preston Pierce, Duke
 - o Kamal Gautam, rPlus
 - Sarah Kulpa, HDR

In light of the election of Sarah Kulpa to replace Jay Anders on the Board, the nominations committee amends its recommendation to include Duff Mitchell on the slate.

Randy- motion to close nominations for final slate of 12. Thomas seconded. Motion passed.

Results of Board vote for final slate of 10:

Carl Atkinson

Mark Benacquisto

Todd Briggeman

Kamal Gautam

Scott Hennessey

Kelly Larimer

Jillian Lawrence

Duff Mitchell

Preston Pierce

Gia Schneider

2024 Board Officer Positions nominations (to be voted on at December meeting):

o Chair: Pam, Thomas

o Vice Chair: Heidi, Carl, Chris Rousseau

Treasurer: Jeff, EricSecretary: Sharon

Item 6 - Recommendation to Launch New Service Offering: Professional Development Training

- Chris Hayes describes recommended approach to providing professional development training in the waterpower arena. Refer to memorandum in Board book for more information.
- Industry need for training based on listening tour in spring of 23 and reconfirmed in workgroup.
- NHA uniquely positioned to fill this role. Can leverage best content developers, trainers, and SMEs to provide high quality curriculum and cover a wide range of scope (licensing to asset management).
- Proposed Hydro Basics/101 course: 8 modules, 5 hours each equals 40 hours delivered over 6 to 9 months. Course Title: "Hydropower System Principals" covering overview of hydro (101), production planning, dam safety, equipment engineering and technology, asset management, markets, environment, licensing, etc.
- 201/301 level curriculum- will cross that bridge in the future.
- Delivery mechanisms: virtual but opportunity to leverage conference/meeting gatherings for inperson classes. Self-learning modules to provide flexibility.
- Certification: looking at Accreditation Board for Engineering and Technology for credits. Testing to play an important part in the curriculum.
- Cost per module: 150k x 8 = \$1.2 million. Additional costs for marketing, logistics and content delivery, etc.
- Jay commented that the proposal seems like a 201-level course and asked if the committee considered a true 101 one-day course? Chris Hayes- we were looking more at curriculum level program with accreditation, but we could develop a crash course in the future.
- Justin commented that FirstLight would send more people to a one-day 101 course, he doesn't see a large audience in IPPs for a 40-hour curriculum. It would take 500 people to sign up for course to recoup \$1.2 million.
- Alan asked who is your audience and recommended considering CLE credits for lawyers to attend. Chris- from my perspective the principles course would be for tech, lawyers, and everyone else.
- Scott asked what is the price point for the course, and noted that NHA needs to be sensitive to advanced training provided by unions and make sure it is complementary. Chris-\$4,000 per person is price point for members. Justin mentioned he thought it was too high for IPPs.
- Thomas commented that we don't want to underprice it. Need to take some risk. Void will be filled by someone else.
- Chris Mattson commented that Tacoma needs a 101 course for its utility workers. When
 onboarding people this would be valuable, especially FERC licensing overview and dam safety.
- Malcolm- I'm hearing consensus on a "yes and" program to include the larger curriculum and a
 one-day crash course. At 4k price point we'd need 300 registrants to break even. Need a better
 sense of how many people would sign up.
- Carl recommended to work in ½ day for a plant tour during a regional meeting.
- Chris Hayes- I've conferred with asset owners and I'm comfortable that they will send people at this price point.
- Warren Paul recommended that we touch base with USSD on its experience on training, it taps FERC and Corps of Engineers as lecturers.

- Tom Sullivan noted that NHA has offered 2-3 day courses in the past and we should look to that experience. We offered course on settlement negotiations and could only do it every 3 years.
- This is not approval to spend \$1.2 million, only for staff to pursue RFP process and present back to Board with an estimate for the budget process at December meeting.
- Proposed Vote for Board approval: the Board directs NHA staff to: (1) solicit bids to hire external support, (2) seek commitments/pre-sell units to cover curriculum development and related program costs, (3) submit 2024 budget with goal of recovering costs in no longer than 2 years, and (4) continue leveraging ad-hoc Advisory Group.
- Chris Rousseau makes motion to solicit bids to hire external support and seek commitments and pre-sell units for full curriculum and one-day comprehensive course, move to next step on budget proposal; Alan seconded. Motion passed.
- Action item: Chris Hayes and training ad-hoc group to solicit bids and pre-commitments and compile budget proposal for presentation at December board meeting.

Item 7 - Biden Administration's Clean Water Act 401, ESA and NEPA Rules

- Mike Purdie provides update.
- 401 rule: effective November 27. If you have an ongoing 401 application, certification will be processed under new rule. EPA claims this is not retroactive rulemaking, NHA looking to focus on this in litigation (low hanging fruit for preliminary injunction against the rule). Troutman will represent NHA to challenge rule. Still looking at what we will file- complaint, preliminary injunction or something else. A preliminary injunction might cause the judge in the existing complaint in N.D. Cal. district court to revive case to review the Trump rule. Will probably file in 5th Circuit in Louisiana.
- ESA Proposed Rule on interagency consultation: NHA/NWHA filed joint comments on August 21, 2023. Reinitiation provision could be very problematic, especially during the existing license term. Rule likely to be finalized in summer or fall 2024. NHA recommends we litigate this provision if it is adopted.
- NEPA Phase II: Proposed rule published by CEQ at end of July. NHA/NWHA filed joint comments. FERC would have to do its own rulemaking to incorporate provisions. NHA will monitor this proposed rule for now.

Item 8 - How to Get Ahead of the Methane Issue

- Mike Purdie presents an update on methane emission arguments.
- This continues to be an issue and the stakes are huge. We brand ourselves on essential part of clean energy solution. This is a direct challenge to whether we are clean. In addition, language in IRA that you qualify for tax credit if emissions are no greater than zero. 80/20 rule goes away if we don't qualify for clean energy tax credit starting in 2025.
- NHA would like to pull together an advisory group to help guide us on this issue.
- Alabama Power Coosa FEIS issued last Friday- FERC pushed back on pre-project conditions, FERC found emissions of GHG are front loaded for projects, it has stabilized, will not require any further evaluation of emissions.
- Recent DOE reports assume reservoir emissions- this is problematic.
- WRI putting out Scope 1-3 guidance that is being picked up by industry. Have not yet issued final Scope 2. We think hydro will be in the clear (direct emissions). In Scope 3 we are vulnerable.
- EDF launching satellite that will monitor emissions, targeting natural gas facilities in Russia and China but only a matter of time before it flies over a reservoir. IHA pointed out there have been flights over hydros in other countries and found that de-gassing is a real phenomenon. NHA needs to figure out how to get ahead of this issue.

- SEC has proposed rule to make public companies with net-zero claims to put out information and California legislation that is similar.
- Volunteers for ad-hoc group: Suzanne Grassell, Jeff Leahey, Tim Hemstreet, Scott Hennessey, Duff Mitchell, Alan Michaels, Randy Herrin. Action item: Malcolm to form advisory group.

Item 9 – DEI: What Steps Can Board Take to Further Advance Our Industry's Commitment

- Malcolm presents on what additional steps Board can take to advance our DEI commitment.
- We are keeping track of speakers and events, highlighting diverse voices at our events. In terms of attendance and participation, our events look like our industry (70% male).
- We've been using an advisory group on this issue.
- Training won't solve issue. Need to keep awareness up, think about unconscious bias. Over time we will make progress even though there is no silver bullet.
- Ad hoc committee wants to increase participation, looking for any Board recommendations.
- Idea to hold soft skills workshop at California regional meeting on implicit bias. Board agreed this would be appropriate. Action item: NHA to proceed with soft skills workshop in California.

Item 10 - Raising Awareness Beyond Our Industry

- Barbara Tyran presents Vision for External Relations:
 - Trying to raise visibility of NHA within state energy policy groups
 - o Help deepen our relationship with ACORE and on transmission issues
 - Barbara to attend NASEO event next week
 - Try to convey messages to state PUCs of valuation of pumped storage
- Copeland Tucker provides update on 2023 National Hydropower Day
 - Social media event was very successful.
 - 382 editorial mentions, 19 mentions from government officials, 396 articles shared on social media. Press releases, industry engagement
 - Invited members of Congress on tour of hydro facility, including Rep. Newhouse from WA.
 - See appendix to Board report.
- Copeland Tucker provides update on "Clean Living" Digital Ad Campaign
 - o Aimed at 1 million millennials in 10 states.
 - Ad currently running.
 - o Tomorrow is global hydropower day. Asking Board to push out IHA's message.

Item 11 - Clean Currents 23: Leveraging NHA's Board to Maximize Event

- Francesca and Joseph brief the Board on events planned during Clean Currents.
 - o Registration at 1,511, at 136% of projected budgeted revenue.
 - 505 are first-timers (35%)
 - o 21 countries represented
 - o 21% of registrants are asset owners (62 companies)
 - o Exhibits- \$1.3 million exhibitor revenue, 110% to budget, sponsor revenue at 350k.
 - o 5 federal agencies here at Show Me the Money station
 - Refer to Board book on comps to last year
- Exhibitor outreach- Board members to greet exhibitors and thank them. Attend coffee break with new attendees to Clean Currents.

Item 12 - New Business

None

Action items:

- NHA to recirculate documents from the Board book on federal funding opportunities, results from National Hydropower Day, and Digital ad campaign.
- Chris Hayes and the training ad-hoc group to move forward on the RFP process and seek presell commitments on the "yes and" training proposal to present at December Board meeting with a budget request.
- Malcolm to form and kick off advisory group to help guide NHA on the methane issue.
- NHA to move forward with soft skills DEI workshop at California regional meeting.

Item 13 - Executive Session

- Thomas moved to go into Executive Session, Jay seconded.
- Jeff moved to conclude Executive Session. Thomas seconded.

Eric VD moved to adjourn meeting, Thomas seconded. All approved. Meeting adjourned at 12:28 pm Eastern.

Attendees:

Executive Committee

Mike Haynes Thomas St. John Sharon White

Pam Sullivan Jim Hancock (General Counsel)

Board Members (virtual where noted)

Carl Atkinson (virtual) Suzanne Biddle Suzanne Grassell (virtual)

Scott Hennessey (virtual)

Sarah Kulpa

Jeff Leahey

Chris Mattson

Alan Michaels

Megan Nesbitt Chris Rousseau Chuck Sensiba (virtual)

Mary Gail Sullivan Justin Trudell (virtual) Eric Van Deuren

Heidi Wahto

NHA Staff/ NHA Committee / Council / Task Force Representatives (virtual where noted)

Marla Barnes Francesca Blanco Hadjimichael Jeremy Chase-Israel (virtual)

Kimberly Costner (virtual) Chris Hayes Joseph LoSasso
Brittney May Michael Purdie (virtual) Kelly Rogers (virtual)
Ellie Rubalow Catherine Ryan (virtual) Copeland Tucker
Barbara Tyran (virtual) Malcolm Woolf Alvin Thoma

Connor Nelson (virtual) Sydney Rovner (virtual) Mike Pederson (virtual)

[Note: 19 of 20 voting Board members were present, representing a quorum. The minutes reflect the order that agenda items were discussed. All times are Pacific.]

Notes follow the Board meeting agenda (Item #) included in the final Board Book, unless noted.

Board Meeting starts at 8:29 AM Pacific – Mike shares a safety moment.

MEETING SUMMARY NOTES

Item 1 – Consent Agenda / Updates

- Mike Haynes notes the Consent Agenda Items are listed in the Board Book, including the updated Committee and Council report.
- Heidi moves to approve consent agent; Thomas seconded. Motion passed.

Item 2 – CEO Report on Key Activities

- Malcolm presents CEO report, provides a personnel update, and shares updates on progress made on NHA's 2023 Strategic Priorities. Details are provided in the Board Book.
 - New Staff members: Ellie Rubalow (Events Specialist), Connor Nelson (Regulatory and Market Affairs Specialist), Sydney Rovner (Program Assistant)
- Some key topics discussed include:
 - Advocacy topics: Streamlining Licensing and Relicensing- bills introduced in House and Senate, moved out of House committee, bipartisan support; Hydropower license reform package- successful hearing in both the Senate and House; Creating Tax Support to Preserve Existing Hydropower- we will be in January/February package, bipartisan group of ten Senators to support, bipartisan group of House members to support, good momentum to get into end of year package; Investing in Waterpower R&D- record appropriations in 2022, this year's bill has not been finalized, Republicans threatening to reduce funding; Effective Implementation of BIL and IRA- actively engaged with Treasury,

money is flowing; Retrofitting Non-Powered Dams- Water Resources Development Act was passed, need COE to implement what the law says; Wholesale Markets- actively engaged with RTOs, need conversation on how we are shaping market rules; Avoiding Unnecessary Regulatory Barriers- financial assurance all quiet from FERC, Biden 401 rule not what we wanted it to be, filed for preliminary injunction in Louisiana.

- Connect topics: Attracting Asset Owners- over 1,600 registrants for Clean Currents, exceeded revenue expectations, need to do more to attract asset owners; Waterpower Week to enhance NHA's advocacy efforts- record participation in 2023, successful WPW Advocacy day (over 173 from industry participating); Promoting DEI at NHA eventsalways more we can do.
- Inform topics: Expanding NHA's social media engagement- 30% growth in NHA's social media accounts; goal of reaching 1 million millennials- we reached over 5 million but unclear to what extent we persuaded them. Much harder than we realized.
- Implement topics: Deepening member engagement- 33% increase year over year in member engagement, particularly because of technical programming led by Chris; executing office relocation with minimal disruptions; retaining NHA staff- goal to retain whole team, currently at full staff (17 employees).

Item 3 – Treasurer's Report

- Thomas St. John presents the Treasurer Report. No slides presented but data is provided in the Board Book. Some highlights include:
- NHA in strong financial position, has collected over 100% of adjusted budgeted annual revenue and incurred 78% of adjusted budgeted expenses to date.
- NHA's cash position remains strong with over half a million held in the operating account.
 Decrease due to CC expenses incurred in this quarter.
- Investment account holds \$3.64 million, up from \$3.06 million this time last year. We shifted 500k in cash to investment account.
- Receivables down nearly \$170k compared to last year, meaning cash is being collected at a faster rate.
- Where the adjusted budget approved by the Board in May anticipated a shortfall of (\$386,099) at the end of 2023, NHA now forecasts a positive end-of-year budget of \$359,645 (a swing of over \$745k). NHA's financial strength is largely due to the success of our events, the DOE Uncommon Dialogue grant, and continued fiscal discipline.
- Revenue is strong with 102% or \$3.46 million of budgeted revenue collected through October.
- Clean Currents- surpassed budget by 12% and is expected to net a profit of more than \$900k.
- WPW- expected to generate \$200K in net profit.
- Expenses expected to come in at budget.
- Marla presented on membership status. Now have 329 member organizations. We have heard from a few companies that will not renew (Idaho Power, Puget Sound, Hydro Quebec, Baslow Electric).

Item 4 – Clean Currents Financial Review

- Francesca and Joseph brief the Board on the financial results of Clean Currents 2023 in preparation for the Board's 2024 budget discussions.
- Revenue increasing every year. Expenses are staying somewhat flat.
- Net revenue over \$900,000 for 2023. Not all expenses are in but it's close.
- Looking forward to 2024- 210 exhibitors for 2023, hoping for 220-230 for 2024. Already at 175.
- Still expecting to grow for 2024 but starting to get to universe of exhibiting companies.

- Additional revenue growth opportunities- sponsor opportunities (25% of exhibiting companies sponsored something in 2023), attendee revenue (getting the right attendees theredecisionmakers, customers).
- See After-Action Report A Focus on Learnings for more information (report distributed at Board meeting).

Item 5 - Election of Board and 2024 Officers

- Slate of candidates for election:
 - o Carl Atkinson, Voith
 - o Todd Briggeman, Black and Veatch
 - Scott Hennessey, Brookfield
 - o Kelly Larimer, Kleinschmidt
 - o Gia Schneider, Natel
 - o Mark Benacquisto, (UBC) Millwrights
 - Jillian Lawrence, Patriot Hydro
 - o Preston Pierce, Duke
 - o Kamal Gautam, rPlus
 - o Duff Mitchell, Juneau Hydropower
- Board approves results of the 2024 Board of Directors election:
 - Carl Atkinson
 - Scott Hennessey
 - Kelly Larimer
 - Jillian Lawrence
 - o Preston Pierce

Thomas moves to close elections, Jeff seconded. Motion approved.

- Nominees for Board Officer positions for 2024:
 - Chair: Pam Sullivan, Chris Rousseau
 - Vice Chair: Heidi Wahto, Carl Atkinson, Chris Rousseau
 - Treasurer: Eric Van Deuren
 - Secretary: Sharon White

Alan moves to approve Sharon as Secretary and Eric as Treasurer (both unopposed). Chris seconded. Motion approved.

Alan moves to vote on Chair and Vice Chair in sequence, Eric seconded. Motion approved.

Pam Sullivan elected Chair. Runoff between Heidi and Chris Rousseau for Vice Chair resulted in tie.

Mike Haynes moves to make Chris and Heidi co vice-chairs and add them to the Executive Committee. Thomas seconded the motion. Motion passed.

- Board approves Officer positions for 2024:
 - Chair: Pam Sullivan
 - Vice Chair: Heidi Wahto, Chris Rousseau
 - Treasurer: Eric Van DeurenSecretary: Sharon White
- Nominating Committee recommendations for Advisory Board members for 2024:
 - Katia Debian (GE)
 - Todd Briggeman (Black & Veatch)
 - Samantha Quinn (Pacific Ocean Energy Trust)
 - Eric Steimle (Rye Development)

Carl moves to approve slate of 4 recommendations from Nominating Committee, Jeff seconded. Motion passed.

- Additional nominations from the Board for Advisory Board members for 2024:
 - Marc Benacquisto (UBC Millwrights)
 - Duff Mitchell (Juneau Hydropower)

Board votes for 5th Advisory Board seat.

Board approves Advisory Board members for 2024:

- Katia Debian (GE)
- Todd Briggeman (Black & Veatch)
- Samantha Quinn (Pacific Ocean Energy Trust)
- Eric Steimle (Rye Development)
- Marc Benacquisto (UBC Millwrights)

Item 6 – Executive Session

- Chris moved to go into Executive Session, Eric seconded. Motion passed.
- Mike Haynes moves to delegate authority to ExCom to finalize contract renewal with Malcolm. Eric seconded. Motion passed.
- Heidi moved to conclude Executive Session, Pam seconded.

Item 7A - Consideration of 2023 Budget

- Refer to Board book for 2024 Annual Budget Summary, 2022-27 NHA Pro Forma Scenario, and NHA's 2023-2026 Goals and Strategies document (adopted by Board in 2022).
- Malcolm reviewed 2024 Annual Budget. Proposing to invest in most important asset (our team).
 Budget does not envision growth in staff for 2024. It proposes funding for expanded
 programming and additional funds for external consultants for IRA advocacy (including 60k for
 legislative tax advocacy and 120k for regulatory/treasury advocacy). This is a tool, not a cap, will
 revisit if needed.
- Areas of additional investment in budget: already spent 80k on 401 litigation in 2023, another 120k in 2024 for district court and Court of Appeals work in 2024. If case involves further action, it would be above and beyond. Hydropower training- \$200k in budget. Budget includes about a

half million more in expenses than revenues. The half million would get us back into compliance with 6-12 month reserve policy.

• Three big assumptions for budget proposal: assumes 5% dues increase with opt out, assumes revenues from Deep Dive policy team, Powerhouse Media Platform, and DOE Uncommon Dialogue grant, and assumes flat growth in terms of net revenues from Clean Currents 2023.

Item 7B – Spotlight on "Hydropower System Principals Training"

- Chris Hayes and Joseph share NHA's efforts to refine the extent of member interest in training and the anticipated costs of developing a high-quality training curriculum.
- Budget proposal includes \$200K in "seed money" to allow NHA to move forward with initial development costs, while anticipating that NHA will present a more detailed recommendation at the March 2024 Board meeting.
- Since October, we sent out a solicitation of interest in the training product. Received interesting data points. In parallel, we sent out a solicitation for service providers to build out curriculum and those to provide in-kind contributions.
- Request for feedback on "Hydropower System Principals" course for hydropower professionalssent to primary contracts at 329 member organizations and received 116 responses. 70% indicated they would be interested in enrolling employees in 40-hour course. 59% likely to enroll employees in 40-hour virtual course. Most said they would send between 1 and 5 employees to participate. 86% indicated they would be likely to participate in 1-day course, most would send between 1 and 5 employees.
- Takeaway- estimate 150-400 units per year. Encouraged by interest in 1-day course. Reinforces what working group predicted as far as interest in the program.
- Curriculum development- Request for Expressions of Interest (precursor to RFP) closes
 December 19, 16 responses received thus far. Includes bidders, trainers, in-kind contributions,
 201 level training opportunities, future lunch and learns.
- Pathway to March 2024 Board meeting:
 - o Finalize bidders list- December 19
 - Issue RFP- week of January 1
 - o Schedule information call with bidders- week of January 15
 - Mobilize proposal review team (manage conflicts)- month of January
 - Proposals due- week of Feb 12
 - Proposal selection (process)- through February ending March 1
 - Budget development- March 8
- Post March 2024- establish peer review team to help monitor QAQC, confirm in-kind contributions, lock down schedule, issue contract for curriculum development, pick learning management system, complete program framework, validate user experience, recruit trainers, complete 1-day course curriculum, complete 40-hour course curriculum.
- Could 1-day course be ready for Clean Currents? If staff gets the green light in March, it's possible.
- 200k in seed money in 2024 budget to get started, vision to finish RFP by WPW Board meeting, discuss costs and industry interest and move forward.

Item 7C – NHA's Digital Ad Campaign

- Copeland Tucker reviews the results of the 2023 "Clean Living" campaign
- 2023 campaign aimed at millennials in 10 states. Ad served as a reminder of waterpower's importance in maintaining a 24/7 clean energy grid. Results- 78% have a strong baseline positive association with hydropower. We exceeded visibility goals (hit around 5 million millennials with

increased frequency). No statistically significant movement on message retention, favorability, importance, and impact. Can't say it had a positive effect. Lessons learned: with favorability already high, it will take additional time and effort to bring those numbers significantly higher. A more targeted campaign may yield stronger results. We may get further by targeting thought leaders who have large platforms.

- Further elevating hydropower in Year 3 requires a fresh approach. Ideas from Bully Pulpit: 1) dive into policy conversation in DC, 2) appeal to zillennial climate advocacy, 3) get climate influencers (policymakers) talking (i.e. state governments, media, think tanks, PUC staff), and 4) deepen relationship with millennials focused on climate-concerned millennials aged 25-40.
- NHA's proposed 2024 budget includes \$300K for digital media campaign and \$100,000 already budgeted for DC advocacy.
- Proposed spend for 2024: \$200,000 for option 1- DC thought leaders and \$200,000 for option 3climate thought leaders. Option for members to provide regional funding for option 4- millennial outreach (100k per region).
- Board agrees this funding is appropriate.

Item 7D – Vote on 2024 Budget

• Mike Haynes moves to adopt 2024 budget. Chris Mattson seconded. Motion passed.

Item 8 – The Long and Winding Road to Overhauling the Federal Power Act

- Chuck presents on the status of legislative license reform efforts.
- Good news- we have a bill that was passed out of full House Energy and Commerce Committee.
 Not Uncommon Dialogue bill but combination of original Cathy McMorris Rodgers bill with
 changes to be closer to Uncommon Dialogue bill and attract more Democratic support. We got 3
 Democrats on bill.
- Next step is to go to the floor.
- On Senate side, harder to get Senate Energy and Natural Resources Committee to take up the bill. Have been on list to be included in a mark-up session since October. Not unexpected. We are deep in negotiations with staff in Energy and Natural Resources Committee and Subcommittee of Oceans within Senate Commerce Committee. Our partnership with Uncommon Dialogue partners is strong. Deploying strategies to get some balance to negotiations with Democratic staff.
- Senator Barrasso's staff deep in review on bill.
- Will try to move bill in first part of next year. The closer we get to Presidential election cycle, the less interest and more partisanship.

Item 9 – NHA's "3R" Tax Proposal to Preserve the Existing Hydropower Fleet

- Brittney May presents on NHA's efforts to include the "3R" tax proposal to provide a 30% ITC for environmental and dam safety investments in any year end (or January) tax package that may advance in Congress.
- Investment tax credit for existing fleet- reframed it for dam safety investments. Message struck people on the Hill. Bill was reintroduced this fall with broad bipartisan coalition of ten U.S. Senators (5 Democrats, 4 Republican, 1 Independent). Bill was introduced in House last week. Hoping it will be included in end-of-year package. At mercy of larger politics. Since they aren't doing a budget until February, that's the natural vehicle for tax credits.

Item 10 - Show Me the Money

- Mike Purdie updates the Board on DOE's implementation of the \$750 million in the section 240 grant programs.
 - Section 242 program- \$125 million appropriated in Bipartisan Infrastructure Law (BIL).
 For CY 2023 payments, \$38 million was awarded to 66 entities.
 - Section 243 program- \$75 million appropriated in BIL. DOE received 93 applications for a requested funding amount of \$199 million. Program oversubscribed. Expect awards to be announced prior to WPW.
 - Section 247 Program- \$553.6 million appropriated in BIL. Received 378 applications.
 Unsure of the cumulative requested funds- may be oversubscribed. Next steps are TBD.
- Non-240 Programs- NHA has made available a funding sheet as a living document and held webinars designated to draw attention to these other programs. Many of these funding opportunities will run out of appropriations in the near-to-medium term.
- NHA's efforts to shape Treasury's implementation of critical IRA provisions. These include: elective pay, Section 48 ITC, domestic content for for-profit and tax-exempt entities, tech neutral credits under Section 45Y PTC/48E ITC, advanced manufacturing credit under Section 45X, Hydrogen Production Tax Credit under Section 445V. NHA to complete RFP process for tax counsel. It is difficult to influence Treasury. They are often in listening mode- not productive. Keep issuing guidance documents that aren't addressing hydropower. Now we are actively lobbying DOE, which is advising Treasury.
- Feedback on what NHA should prioritize in 2024 and how NHA can help member companies take advantage of these opportunities.
- WPTO authorization is up in 2025, need to think about efforts to reauthorize it.

Item 11 - Biden Administration's Clean Water Act 401

- Chuck provides update on NHA's challenge to Biden administration's re-write of the Trump Administration's 401 rule.
- On December 4, NHA filed complaint with federal district court for Western District of Louisiana challenging 401 regulations. Filed with group of states, American Petroleum Institute, and Interstate Natural Gas Association. Also filed request for preliminary injunction to prevent rule from applying to projects with pending 401 applications. Seeking nationwide injunction.
- Next step in injunction is court will impose deadline for United States to respond.

Item 12 – How to Scale Our Markets Advocacy Efforts

- Mike Purdie presents on NHA's efforts to help the industry engage in shaping market design, including leveraging the Markets Committee to be the issues clearinghouse, and engaging before FERC and RTOs on issues of particular impact to the industry.
- Historically, NHA's input into market rule changes has been narrow and targeted. One-size-fitsall market design will never take hold. NHA has operated as a clearinghouse at the Markets Committee as a way to share information across regions.
- Many asset owners have a broad portfolio and have to balance their advocacy accordingly. Each
 region has its own stakeholder processes and market designs. How do we get NHA to be seen by
 NHA members and outside groups as an important entity in this space?
- Options for Board Consideration:
 - Option 1: Continue status quo with Markets Committee targeting issues as they arise.
 Pro is it is a bottom-up process with limited budget impact. Downside is NHA is a complement to advocacy already occurring.

- Option 2: Targeted RTO/ISO Stakeholder Engagement: Option 1 but become a stakeholder, can bring forward market policy designs. Could be resource intensive and challenges in getting all members in that region to agree on a design change.
- Option 3: Market Policy Thought Leader. Focuses more on developing market designs and partnering with external parties (other trades, certain companies). Would require market participants to bring the designs to the respective stakeholder bodies. Limited FTE impacts but requires high outside consultant budget for economist.
- Alan: Something between options 2 and 3. Issue based not RTO based. Let members raise relevant issues.
- Pam: Need to get the right people on this committee who live and breathe RTO/ISOs.
- Board agreed to continue Option 1 and try thought leadership approach with message of 24/7 grid resiliency.

Item 13 - Cultivating New External Relationships

- Barbara Tyran presents on how NHA can help raise awareness of the benefits of waterpower by partnering with ACORE and other clean energy organizations to successfully connect with regional, state, and local decision-makers.
- NERC just issued winter reliability assessment last week- huge portions of country at risk on insufficient resources to operate through extreme weather. Makes system vulnerable.
- Importance of external relations. Community eager to get more information.
- Barbara has been meeting with different institutions over the last couple of weeks to get ready for 2024, including State Utility Commissioners, NARUC, National Governors Association, National Conference of State Legislatures, etc. Need to work with other energy associations to leverage combined resources.
- Barbara spoke at National Governor's Association Energy Policy Summit on hydro and transmission issues. Invited to Speak at National Conference on State Legislatures' workshop on these topics. National Association of State Energy Officials (NASEO) annual meeting.
- Exploring Democratic or Republican conventions and other opportunities. Pay to play opportunities before other organizations.

Item 14 - Roll Out of Op-Ex Reimagined

- Chris Hayes shares updated tool with Board and seeks guidance on how best to roll it out and encourage greater utilization of the resource.
- 267 reports in Opex, 12 more have been delivered to NHA to enter into system. Want to leverage regional meetings- tie workshops to those.
- How can NHA staff help you to help us drive submissions to the Op-Ex tool?
- We are hearing it is a top-down request. Assignment needs to come from the top at member organizations to get people to log in to look at the reports. Eric- this won't work because our team is too busy. But if you are starting a new project or activity, one item of preparation would be to review Op-Ex. The more you make it part of what you have to do anyway, the more they will use it. When NHA team got on a webex with asset owners for an Op-Ex overview, it helped.
- Sharon: Ask members who submit FERC incident reports to submit report to Op-Ex or actively monitor eLibrary for incident reports and ask members to submit parallel Op-Ex report.

Item 15 - Looking Ahead to Potential Strategic Opportunities

 Helping existing hydro champions. Need to support Senator Cantwell who is in the upcoming election cycle. Important for industry to throw a fundraiser for Senator Cantwell. She won't take PAC money. Asking each Board member to write a \$500 check.

- Other strategic opportunities to provide additional value to members?
- Next steps with respect to Clarion and HydroVision? We had an internal staff brainstorm that developed questions on this. Do we think HydroVision will continue, go out of business, or be sold? How does that impact us? What if HydroVision merged with CEATI? If HydroVision asked us to buy it, are they valuable?
 - o Do we use their name or retire it? "HydroVision, now part of Clean Currents"
 - o International aspect- do we want to expand into that and do we have that expertise?
 - Hydro Review and publications could be valuable.
 - Women in Hydro Vision award could be moved over to NHA.
 - Do we do nothing and let it run its course.
 - Consensus to wait it out and let them come to us.
- Opportunities to partner with CEATI and/or HRI?
 - Could we do more to support other organizations, like Northwest Hydro? International Hydro Association? Do we need a subset of the Board to brainstorm before our strategic meeting in six months?
 - o Those organizations should approach us for help.
 - o Should not get involved with for-profit organizations like Clarion and CEATI.
 - We should partner with regional transmission organizations to position hydro to support changes that will occur in those spaces.
 - o Tech neutral clauses in IRA are important- aligning our approach with other tech neutral groups could take burden off our team.
 - o Barbara- we are working with ACORE on the macro-grid initiative- a communications campaign on transmission grid and needed upgrades.
 - Could NHA play the coordination role with other organizations?

Item 16 – Preview of the Next Two Days and the California Regional Meeting

- Marla previews California Regional Meeting programming.
- Dam safety workshop on Comprehensive Assessments tomorrow afternoon- Dave Capka from FERC to attend.
- 180 registrants- largest California regional meeting in NHA history.
- Board meetings in 2024- March at WPW in DC, second in Chicago (tentative) week of July 8, third in October in Portland at CC, December in DC.

Item 17 - Recognition of Outgoing Board Members

- Mike Haynes
- Randy Herrin
- Mary Gail Sullivan
- Alvin Thoma (as past Chair)

Item 18 - New Business

None.

Action items:

- -Malcolm to send email about Cantwell fundraiser
- -Kimberly to send draft schedule of Board meetings for next year

Jeff moved to adjourn meeting, Pam seconded. All approved. Meeting adjourned at 4:42 pm Pacific.