



## NHA Board of Directors Meeting Q3 2023 Agenda

October 10, 2023

Virtual Call information:

[Click here to join the meeting](#)

Meeting ID: 211 692 131 941

Passcode: wPuHqZ

**Or call in (audio only)**

[+1 469-253-5858,,577439036#](#) United States, Dallas

Phone Conference ID: 577 439 036#

*Board Dinner: Oct 9th, 6-9 PM at McCormick & Schmick - 21 E. 5th Street, Cincinnati; 513-721-9339*

### October 10, 2023

	8:00-8:05	<b>Introductions / Safety</b>	Mike Haynes NHA Chair	
<b>Item 1</b>	8:05-8:10	<b>Consent Agenda / Updates</b> <ul style="list-style-type: none"><li>- July 2023 Board Call Minutes</li><li>- Status of Action Items</li></ul>	Mike Haynes	<b>Approval</b>
<b>Item 2</b>	8:10-8:30	<b>Hydropower Foundation Update</b>	Linda Church Ciocci Executive Director	Information Only
<b>Item 3</b>	8:30-8:50	<b>CEO Report</b> <ul style="list-style-type: none"><li>- Personnel updates</li><li>- Progress report on 2023 Strategic Priorities</li></ul>	Malcolm Woolf NHA CEO	Information Only
<b>Item 4</b>	8:50-9:05	<b>Treasurer's Report</b> <ul style="list-style-type: none"><li>- Q3 2023 Financials</li><li>- Q3 Membership and non-dues revenue update</li></ul>	Thomas St. John Treasurer Marla Barnes VP, Member and Industry Engagement	Information Only

<b>Item 5</b>	9:05-10:05	<b>Board Nominations</b> <ul style="list-style-type: none"> <li>- <i>Open Board Seat:</i> Executive Committee recommendations / vote</li> <li>- <i>2024 Board Candidate Slate:</i> Nominations Committee recommendations / vote</li> <li>- <i>2023 Board Officer positions:</i> Initial nominations</li> </ul>	Mike Haynes	<b>Approve</b>
	10:05-10:20	<b>BREAK</b>		
<b>Item 6</b>	10:20-10:50	<b>Recommendation to Launch New Service Offering: Professional Development Training</b>	Chris Hayes	<b>Approve</b>
<b>Item 7</b>	10:50-11:00	<b>Biden Administration’s Clean Water Act 401, ESA and NEPA</b>	Michael Purdie Dir. of Reg Affairs	Information Only
<b>Item 8</b>	11:00-11:10	<b>How To Get Ahead of the Methane Issue</b>	Michael Purdie	<b>Feedback</b>
<b>Item 9</b>	11:10-11:25	<b>DEI: What Steps Can Board Take To Further Advance Our Industry’s Commitment</b>	Malcolm Woolf	<b>Feedback</b>
<b>Item 10</b>	11:25-11:35	<b>Raising Awareness Beyond Our Industry</b> <ul style="list-style-type: none"> <li>- Vision for External Relations</li> <li>- 2023 National Hydropower Day</li> <li>- “Clean Living” Digital Ad Campaign</li> </ul>	Barbara Tyran Dir. of External Relations Kelly Rogers Manager, Policy/Communications Copeland Tucker Director of Public Affairs	Information Only
<b>Item 11</b>	11:35- 11:45	<b>Clean Currents 23: Leveraging NHA’s Board to Maximize Event</b>	Francesca Hadjimichael Director of Meetings and Events Joseph LoSasso Director of Corporate Partnerships and Senior Manager of Industry Engagement	Assignment
<b>Item 12</b>	11:45-11:50	<b>New Business</b>		
<b>Item 13</b>	11:50-12:00	<b>Executive Session</b>		
	12:00	<b>Adjourn</b>		



**NHA Board of Directors' Meeting  
Oct. 10, 2023**

I'm looking forward to seeing (most of you) next week in Cincinnati!

This memorandum provides background information for the Board meeting in advance of Clean Currents 2023. A TEAMS link will be available for those unable to join us in person.

**Agenda Item 1, Consent Agenda and General Updates**

**Recommended Actions: Approval**

- **Approve** the July Q2 2023 Board Minutes (in Appendix), and
- Review for your information the updated Committee and Council report (in Appendix).

**Background/Options:** To provide more time during our meetings for strategic discussion, items that should not require discussion are placed on a Consent Agenda. All items on this agenda will be moved as one. Any item can be removed from the Consent Agenda at the meeting should Board members desire further clarification or discussion. Board members are encouraged to review the item(s) in advance of the meeting and be prepared to approve them.

**Agenda Item 2, Update from Hydropower Foundation**

**Recommended Action:** Information Only

**Background:** Linda Church Ciocci, Executive Director of the Hydropower Foundation, will help kick-off the Board meeting by providing an update on Hydropower Foundation activities. The Foundation has recently updated its mission statement to focus more directly on developing potential new workers for the water power industry.

**Agenda Item 3, CEO Report on Key Activities**

**Recommended Action:** Information only.

**Background:** Malcolm Woolf will review NHA's progress to date towards achieving our 2023 Strategic Priorities, as well as introducing new NHA staff, sharing updates on key legislative activities, and other new developments.

**Agenda Item 4, Treasurer's Report**

**Recommended Action:** Information only.

**Background:** Consistent with NHA's Bylaws, NHA's Treasurer Thomas St. John will review NHA's finances through August 31, 2023, including the latest information on NHA's investments and reserves.

Attached for your information is:

- NHA’s Oct. 2023 Treasurer’s Report, covering through August 31, 2023,
- NHA’s Statement of Financial Position and Operating Income Statement, as of August 31, 2023,
- NHA’s August 2023 Q3 Membership Report, and
- NHA’s August 2023 Q3 Non-Dues Revenues Report.

### **Agenda Item 5, Board Nominations**

#### **Recommended Action: Approval**

**Background:** This agenda item requires two Board actions. First, the Board needs to vote to fill the open Board seat, vacated by Jay Anders, that remains until 2025. Fortunately, Jay remains on the Board as our immediate Past Chair.

Second, the Board needs to approve a slate of candidates for the 2024 NHA Board. Twenty-four individuals were nominated, which we think is a new record! As required under NHA’s bylaws, the NHA Nominations Committee will propose candidates to be considered by the Board for the final slate (maximum of ten). As required, only two of the candidates may be existing Board members. The candidates (in alphabetical order) are:

- Carl Atkinson – Voith Hydro, Inc.
- Mark Benacquisto – (UBC) Millwrights
- Ryan Berg - Hatch
- Randy Bowersox – Gannett Fleming
- Carl Brewster – West USA, Inc.
- Todd Briggeman – Black & Veatch
- Phillip Cantarinha – KGS Group
- Katia Debian – GE
- Kamal Gautam – rPlus Hydro
- Tim Hemstreet - PacifiCorp
- Jason Heilman – American Hydro
- Scott Hennessey - Brookfield
- Nuria Holmes – SWCA
- Sarah Kulpa - HDR
- Kelly Larimer - Kleinschmidt
- Jillian Lawrence – Patriot Hydro
- Jenna Mandell-Rice – Van Ness Feldman
- Duff Mitchell – Juneau Hydro
- Debbie Mursch - GE
- Warren Paul - Kiewit
- Preston Pierce – Duke Energy
- Gia Schnider - Natel
- James Stevens – Preformed Windings
- Ed Zapel – Northwest Hydraulic consultants

After discussing and approving a final slate of candidates, the Board will also open nominations for the 2022 NHA Board Officer positions.

### **Agenda Item 6, NHA’s Recommendation to Launch New Professional Development Training**

#### **Recommended Action: Approval**

**Background:** During the July 2023 NHA Board of Directors Meeting, an ad-hoc working group was established to review opportunities to provide professional development training in the water

power arena. The working group concluded that such training is much needed and that NHA is uniquely positioned to fill existing training gaps.

Chris Hayes will describe NHA's recommended approach (as outlined in the attached document). In short, NHA is recommending that we invest in developing a high-quality professional development curriculum and certification program, which would provide a valuable service to the industry, deepen NHA's existing value proposition, and further diversify NHA's revenues.

Attached for your information is:

- "A New Service Offering from the National Hydropower Association: Professional Development Training for the Hydro Industry," dated Oct. 10, 2023.

### **Agenda Item 7, Biden Administration's Clean Water Act 401, ESA and NEPA**

#### **Recommended Action: Feedback**

**Background:** Michael Purdie will update the Board on NHA's engagement on a number of critical regulatory issues.

Most notably, NHA is actively preparing to challenge in federal court the Biden Administration's just released re-write of the Trump Administration's 401 rule. As the Board will recall, NHA successfully litigated (all the way up to the U.S. Supreme Court!) to preserve the Trump Administration's 401 rule until a replacement is adopted.

This session will also briefly alert the Board to several new proposed rules on which NHA has recently filed comments, including the new Endangered Species Act Interagency Consultation proposal and the NEPA phase II proposal. Depending on the outcome of the final regulations, litigation may be necessary in 2024 on one or both of these rules as well.

### **Agenda Item 8, Getting Ahead of the Methane Issue**

#### **Recommended Action: Feedback**

**Background:** All forms of waterbodies, including freshwater reservoirs, lakes, rivers, marshes, and wetlands, can emit carbon dioxide (CO<sub>2</sub>) and methane gases (CH<sub>4</sub>) due to the microbial processes in water and sediment. Distinguishing between potential reservoir emissions and emissions that can be attributable to hydropower operations is therefore critical.

Opponents of hydropower are using this issue to challenge hydropower's status as part of a clean energy future. Strategic direction from the Board would be appreciated as NHA works to get in front of these serious allegations.

## **Agenda Item 9, What Steps Can the Board Take To Further Advance Our DEI Commitment**

### **Recommended Actions: Feedback**

**Background:** NHA updated our bylaws last year to reflect the importance of valuing DEI. This session will explore what additional steps the Board could take to further advance our DEI commitment.

## **Agenda Item 10: Raising Awareness of Water Power’s Benefits Beyond Our Industry**

### **Recommended Action: Information Only**

**Background:** This session will focus on a number of steps – and new employees - that NHA has hired to help raise awareness of the benefits of water power beyond our members, our industry, or even Capitol Hill.

First, please welcome to NHA Barbara Tyran, the longtime Director of Washington and State Relations for EPRI, as NHA’s our new Director of External Relations. In addition to supporting NHA’s Pumped Storage Committee, she will focus on building relationships with state and regional policy makers, non-profit organizations, and industry groups to forge new partnerships and alliances.

Second, National Hydropower Day continues to be embraced by both industry and government agencies as a fun way to celebrate the benefits provided by water power. In this session, Kelly Rodgers, NHA’s Manager of Policy and Communications, will share the results of 2023’s National Hydropower Day.

Finally, Copeland Tucker, NHA’s new Director of Public Affairs, will share the final version of NHA’s digital ad, “Clean Living,” which highlights how hydropower complements wind and solar to create a 24/7, reliable, carbon-free grid. We successfully expanded the ad this year into ten states in the Northeast, the South, and the Midwest. The campaign is made possible by a combination of NHA’s budget and the generosity of Alabama Power Company, Ameren, American Municipal Power, FirstLight Power, Gravity, Georgia Power Company, Kleinschmidt Associates, Minnesota Power, Missouri River Energy Services, New York Power Authority, and Tennessee Valley Authority.

## **Agenda Item 11, Leveraging NHA’s Board to Maximize Clean Currents 2023**

### **Recommended Action: Action**

**Background:** Francesca Blanco Hadjimichael and Joseph LoSasso will preview the great week ahead planned for *Clean Currents 2023*. In addition to walking you through NHA’s mobile app and other pro-tips to make the most of the week, we will share what we need from you – particularly with respect to exhibitor outreach – in the next few days.

**Agenda Item 12, New Items for Board**

**Recommended Action:** Information only.

**Background:** This session is set aside for any Board member to raise additional items not previously discussed.

**Agenda Item 13, Executive Session**

**Recommended Action:** Information only.

**Background:** Executive Sessions are portions of the Board meeting that only Board members attend. Staff and other attendees are excluded to allow for candid and confidential conversations between Board members and the CEO. Agenda items for Executive Session should be brought to the Board Chair's attention in advance.

## FINANCIAL REPORT

TO: NHA Board of Directors  
FROM: Thomas St. John, Treasurer  
DATE: September 28, 2023  
RE: NHA Treasurer's Report

Unaudited financial statements through August 31st are submitted for review.

### **SUMMARY:**

The attached financial statements compare 2023 actual and forecast activity to the original budget as well as the adjusted budget approved by the board in July.

Through August, NHA remains in a strong financial position having collected over 100% of the July adjusted budgeted annual revenue and incurring 57% of modified budgeted expenses. We expect expenses to continue accruing and come into line with the updated forecast as many of NHA's major expenses occur later in the year. NHA's cash position remains strong with over \$1M held in the operating account. The investment account holds \$4.07M, up from \$3.02M this time last year. Receivables and payables are both up \$250K and \$500K respectively.

### **SIGNIFICANT ITEMS TO NOTE:**

**Membership and G&A** – Revenue is strong with 100% or \$3.4M of budgeted revenue collected through August. Expenses are tracking well and expected to land near the Adjusted Budget by the end of the year.

**Policy Advocacy** – Policy Advocacy revenue has been forecast up an additional \$100K from the Original Budget as NHA has successfully been awarded a DOE grant as part of the Uncommon Dialogue. (NHA will receive an estimated \$600K over the 24-month grant.) Other revenue comes from members joining the Deep Dive Policy Group. We expect expenses to remain close to the original budget for 2023.

**Clean Currents** – One month out from The Clean Currents conference and trade show, NHA has brought in 90% of its budgeted revenue. As expected, expenses are still considerably under budget, but we will see these come in line during September and October.

**Waterpower Week** – The Waterpower Week meeting revenue has exceeded revenue estimates by \$88K, with expenses up only \$35K compared to budget. Overall, the event is expected to generate \$200K in net profit, \$85K more than budgeted. Expenses have reached 86% of budget to date and we expect to land near our original budget by year end with upcoming consulting and meeting expenses.

**Other Events** – Regional Meeting activity has increased more than budgeted in 2023, resulting in an increase in revenue and expenses forecast. Total forecast activity is expected to add \$170K to the bottom line, up from the \$130K budgeted.



**Strategic Investment of Excess Reserves** – In approving NHA’s 2023 budget last December, the board created a “strategic investment” line item to bring NHA back into compliance with the organization’s liquid asset policy, which requires that NHA maintains an operating reserve balance of 6-12 months. To date, NHA has used these funds to 1) hire consultant Chris Hayes as senior advisor of Technical Programs and Services, and 2) raise hydropower’s visibility by sponsoring and speaking at various events, including the Aspen Clean Energy Institute and National Clean Energy Week.

**OTHER NOTES:**

Investments are still relatively flat so far this year. Consistent with NHA’s investment policy, only 17% of NHA’s financial assets held in the brokerage account are invested in equities.

NHA’s liquid asset balance was \$5.1M at the end of August, up from \$3.49M at the end of 2022. NHA is usually cash heavy at the beginning of the year due to membership and early event related collections, but cash balances diminish as expenses come in throughout the year. There are currently \$784K of current liabilities and more than \$1M in Clean Currents costs forecast that will reduce this cash balance by the end of the year.

According to the most up to date forecast, we expect to finish the year \$39K in the red, about \$350K better than the July adjusted budget.



National Hydropower Association  
STATEMENT OF ACTIVITIES - UNAUDITED  
for the eight months ended August 31, 2023

	Jan-Aug 2023	2023 Forecast	2023 Adj. Budget	Actuals vs. Adj. Budget	2023 Annual Budget
<b>REVENUE</b>					
Membership and G&A	3,423,681	3,452,888	3,398,319	25,362	3,398,319
Policy Advocacy	212,417	341,000	335,000	(122,583)	235,000
Tech Insights and Public Affairs	283,000	283,000	-	283,000	-
Clean Currents	1,763,528	2,028,631	1,964,674	(201,146)	1,964,674
Waterpower Week	483,450	483,450	472,000	11,450	395,000
Other Events	216,845	236,000	185,000	31,845	185,000
<b>TOTAL OPERATING REVENUE</b>	<b>6,382,922</b>	<b>6,824,969</b>	<b>6,354,993</b>	<b>27,929</b>	<b>6,177,993</b>
<b>EXPENSES</b>					
Salaries, Benefits, and Temp Help	1,477,546	2,484,932	2,494,041	(1,016,496)	2,292,041
Membership and G&A	516,554	947,763	933,200	(416,646)	1,003,200
Policy Advocacy	531,862	934,663	936,875	(405,013)	986,875
Tech Insights and Public Affairs	782,390	843,296	719,800	62,590	669,800
Clean Currents	232,987	1,300,875	1,324,228	(1,091,241)	1,324,228
Waterpower Week	242,306	281,494	278,225	(35,919)	278,225
Other Events	42,909	65,796	54,711	(11,802)	54,711
<b>TOTAL OPERATING EXPENSES</b>	<b>3,826,554</b>	<b>6,858,819</b>	<b>6,741,081</b>	<b>(2,914,527)</b>	<b>6,609,081</b>
<b>CHANGE IN OPERATING NET ASSETS</b>	<b>2,556,368</b>	<b>(33,850)</b>	<b>(386,088)</b>	<b>2,942,455</b>	<b>(431,088)</b>
Investment Activity, Net	4,293	-	-	-	-
<b>TOTAL CHANGE IN NET ASSETS</b>	<b>2,560,661</b>	<b>(33,850)</b>	<b>(386,088)</b>	<b>2,942,455</b>	<b>(431,088)</b>



National Hydropower Association  
STATEMENTS OF FINANCIAL POSITION - UNAUDITED  
As of August 31, 2023

	August 31, 2023	August 31, 2022
<b>ASSETS</b>		
Cash and cash equivalents	\$ 1,020,144	\$ 1,445,042
Investments	4,071,126	3,018,164
Accounts receivable	421,957	169,121
Prepaid expenses	195,904	145,108
Property and equipment, net	45,418	256,416
Other assets	930,159	90,768
TOTAL ASSETS	6,684,707	5,124,618
<b>LIABILITIES</b>		
Accounts payable and accrued expenses	784,727	153,185
Payroll liabilities	89,085	82,297
Deferred rent	1,013,507	658,901
TOTAL LIABILITIES	1,887,319	894,383
<b>NET ASSETS</b>		
Ending Net Assets	4,797,388	4,230,236
TOTAL NET ASSETS	4,797,388	4,230,236
TOTAL LIABILITIES AND NET ASSETS	\$ 6,684,707	\$ 5,124,618



# 2023 Membership Update

As of September 29, 2023, Page 1 of 2

## 2023 By the Numbers

Overall # of Organizations	343
# of New Members so far (list on page 2)	38
Collected Dues (budget is \$3,377,819)	\$3,380,298 ( <i>\$120,754 of this was collected since last board meeting</i> )
# of Dropped Members so far	5; another 13 at risk ( <i>represents a total of ~\$100K in revenue</i> )

## Actions for 2023 Q4

- Confirm with members – current “membership category” is correct
- Prepare and send invoices for 2024 membership dues
  - 5% increase over 2023
  - Payments due February 15, 2024
- Continue to collect dues payments for 2023 (~\$101,500) left to collect from ~40 organizations)
- Continue contacting each organization that did not participate in any members-only activities, to determine the “why” and find out how NHA can be more valuable to these organizations
- Continue to engage with top prospects, re: value of membership, to get commitments for 2024:
  - ABB
  - Alliant Energy
  - Dairyland Power Cooperative
  - Los Angeles Department of Water and Power
  - Oklahoma Municipal Power Authority
  - Portland General Electric
  - Xcel Energy (Matt Allen working on it)
  - Clean Currents’ 2023 Exhibiting Companies Who Are Not Yet Members (more than ½ the exhibitors)

# 2023 Membership Update

As of September 29, 2023, Page 2 of 2

## Member Organizations Joining in 2023

(\* = those who've joined since last board meeting)

3U Technologies LLC
AES Hydro dba A&B Foundry, Machining and Fabrications*
Agilitas Energy
Anchor Coalition
Anchor QEA*
Avista*
Bechtel
California State Polytechnic San Luis Osbispo
Chalmers & Kubeck (C&K)
City of Sturgis, Michigan
DHR Hydro Services*
Douglas County PUD
El Dorado Irrigation District
Gatto Construction Services
Global Diving and Salvage
Global Infrastructure Associates
Hull Street Energy
Hydro Green Energy
Hydrogrid*

Hydro Tech Inc.
Keller
KGS Group International Inc. Usa
kW Hydroelectric*
L&H Industrial
LaBella
LAPCO (Lynchburg Air Preheater Corp.)
Mott MacDonald*
Petrotech, Inc.
River Connectivity*
R.W. White*
Sean Sadlier*
Southern Adventist University*
St. Anthony Falls, University of Minnesota*
Techno Hydro
Thorndike Energy LLC
Tide Mill Institute
Triton Systems*
Western Area Power Administration*



**The National Hydropower Association, Inc.**

200 Massachusetts Ave NW, Suite 320, Washington, DC 20001 • 202.805.5057 • www.hydro.org

**Non-dues Revenue Report  
2023 Budget to Actuals  
As of Friday, September 29, 2023**

<b>Waterpower Week</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
<b>Reg Revenue</b>	\$320,000.00	\$404,948.00	127%
<b>Reg #</b>	460	570	124%
<b>Sponsorship</b>	\$75,000.00	\$78,500.00	105%
<b>Total Revenue</b>	<b>\$395,000.00</b>	<b>\$ 483,448.00</b>	<b>122%</b>
<b>Total Expenses</b>	<b>\$ 278,225.00</b>	<b>\$ 274,754.83</b>	<b>99%</b>
<b>Total Net</b>	<b>\$116,775.00</b>	<b>\$ 208,693.17</b>	<b>179%</b>

<b>Clean Currents</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
<b>Reg Revenue</b>	\$400,000.00	\$ 407,370.00	102%
<b>Reg #</b>	1,200	1,183	99%
<b>Sponsorship</b>	\$375,674.00	\$350,020.00	93%
<b>Exhibits</b>	\$1,189,000.00	\$1,323,181.00	111%
<b>Total Revenue</b>	<b>\$1,964,674.00</b>	<b>\$ 2,080,571.00</b>	<b>106%</b>
<b>Total Expenses</b>	<b>\$1,324,425.00</b>	<b>\$1,324,425.00</b>	
<b>Total Net</b>	<b>\$ 640,249.00</b>	<b>\$ 756,146.00</b>	<b>118%</b>

<b>Regional Meetings</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
<b>Reg Revenue</b>	\$ 65,000.00	\$ 74,875.00	115%
<b>Reg #</b>	560	570	102%
<b>Sponsorship</b>	\$ 120,000.00	\$ 148,750.00	124%
<b>Total Revenue</b>	<b>\$ 185,000.00</b>	<b>\$ 223,625.00</b>	<b>121%</b>
<b>Total Expenses</b>	<b>\$51,836.00</b>	<b>\$29,142.18</b>	
<b>Total Net</b>	<b>\$133,164.00</b>		

<b>POWERHOUSE</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
Sponsorship	\$100,000.00	\$72,617.00	73%
<b>Total Revenue</b>	<b>\$100,000.00</b>	<b>\$72,617.00</b>	<b>73%</b>
<b>Total Expenses</b>	<b>\$36,100.00</b>		
<b>Total Net</b>	<b>\$63,900.00</b>		

<b>Career Center Job Board</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
Revenue	\$8,500.00	7,626.88	90%
<b>TOTAL</b>	<b>\$8,500.00</b>	<b>\$7,626.88</b>	<b>90%</b>
<b>Total Expenses</b>			
<b>Total Net</b>			

<b>Deep Dive Policy Team</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
Participation	\$110,000.00	\$131,000	119%
<b>TOTAL</b>	<b>\$110,000.00</b>	<b>\$131,000.00</b>	<b>119%</b>
<b>Total Expenses</b>			
<b>Total Net</b>			

<b>Digital Ad Campaign</b>	<b>Budget</b>	<b>Actuals to date</b>	<b>% of Actuals to Budget</b>
NHA Budget	\$300,000.00	\$300,000.00	100%
Donations from members		\$283,000.00	
<b>Total Revenue</b>	<b>\$300,000.00</b>	<b>\$583,000.00</b>	
<b>Total Expenses</b>			
<b>Total Net</b>			

<b>Grand Total - Revenue</b>	<b>\$3,063,174.00</b>	<b>\$ 3,581,887.88</b>	<b>117%</b>
------------------------------	-----------------------	------------------------	-------------



## **A New Service Offering from the National Hydropower Association Professional Development Training for the Hydro Industry**

### **Feedback from the Training Working Group and Recommendation to the NHA Board October 10, 2023**

#### **Section I: Background**

During the July 2023 NHA Board of Directors Meeting, an ad-hoc working group of board members was established to review the opportunities to provide training in the hydropower arena and guide/advise the NHA staff in developing a proposal to the full board regarding training offerings. NHA staff supplemented the working group with a few representatives of NHA member organizations who've expressed interest in and need for training.

Ad-Hoc Working Group participants included:

- Brienne Wilson – U.S. Army Corps of Engineers\*
  - Chris Mattson – Tacoma Power
  - Don Nims - Colliers Engineering & Design\*
  - Eric Van Deuren – PG&E
  - Heidi Wahto – Stantec
  - Mark Benacquisto – United Brotherhood of Millwrights\*
  - Megan Nesbitt – Andritz
  - Nuria Holmes – SWCA\*
  - Sarah Kulpa – HDR
  - Thomas St. John – Southern Company
- \*=non-board members

The group convened 7 times between August and October 2023, culminating in the recommendation captured here within.



The ad-hoc working group discussed a wide variety of topics, including: Overall Concept (Gap, Service, Value to Industry), Offering / Curriculum Development, Content, Delivery Vehicles, Certification, Budget (Launch costs, re-occurring costs) and Fee Structure.

## **Section II: Discussion Outputs from the Working Group**

Although there are various training offerings available in the industry covering different aspects of hydropower, there currently does not exist an all-encompassing option looking at the full system of hydropower production. A Hydro Basics / 101 course has been suggested as phase 1; the working title of the course is currently "Hydropower System Principals" and would cover:

Introduction / Overview / Foundation / Water to Wires  
Production Planning and Water Management  
Dam Safety  
Equipment, Engineering and Technology  
Asset Management  
Markets  
Environment  
Licensing

In subsequent years, future phases of the Training Academy development effort could cover topics such as:

- Hydro 201/301 level courses for SMEs
- Hydropower Training for executives (new to hydro and coming over from nuclear, thermal etc)
- Construction Management (Observation / Inspection)
- Contracting Types (design/build vs...)
- Exchange Program

Given the NHA's standing in the Hydropower Industry, our unique positioning will allow the training program to draw from the best in-class expertise available given the subjects being addressed. This will provide the flexibility to match up each curriculum topic with the most appropriate expert body or person available including content developers and trainers. The outputs will culminate in a high-quality training program that is both non-commercial in nature and technically deep and detailed. The curriculum will be developed to form part of virtual and/or in person classroom teaching while remaining available to be consumed on demand by individual members.

It was agreed that a "Certified by NHA" accreditation would be valuable and suggested that Continuing Education Units/Professional Development Hours are more important than College credits at this point, although this remains a longer-term goal. It has been noted that 1 college credit could require up to 30 hours of study.

Testing should play an important part in the curriculum as this will ensure that content is prepared with rigor and to certain standards.

Relative to fees for students enrolling in the course, it was determined that \$100 per hour of training was a fair benchmark inside of this industry.

The Working Group concluded that this service is highly needed and would augment NHA's value proposition. Several group participants indicated their organizations would likely be committing to purchase multiple course seats. The group believes selling as many as 300 course seats a year is realistic.

The group recommends that NHA staff aims to seek commitments now for pre-purchasing of units, with a particular focus on asset owners, to confirm the need for and commitment to the course.

### **Section III: Proposal**

Given the proposed course content and the eight modules outlined in Section II, this represents approximately 40 hours of training, while targeting approximately 5 hours per module. It has been noted that 1 hour of content equates to roughly 50 slides or content screens. This virtual course would be delivered over the course of a year (perhaps 8 or 9 months). At the same time, NHA would explore opportunities to leverage existing in-person NHA activities including 4 x regional meetings and 2 x national conferences and associated plant tours, networking events, workshops, etc.

NHA will also explore self-learning modules and to provide members with the flexibility to consume materials at their own pace, assign mentors internally to promote internal networking/ knowledge transfer, and make this training available as part of their internal on-boarding.

The ABET (Accreditation Board for Engineering and Technology, Inc.) is a non-governmental organization that accredits post-secondary education programs in applied and natural sciences, engineering, and engineering technology. The ad-hoc group has recommended ABET as a potential collaborator for this initiative.

Given the industry cost benchmarking noted in Section II, it is recommended that this Hydropower System Principals Course be offered at a cost of \$4,000 per person for members and potentially at a double the cost for non-members.

Based on initial discussions with Asset Owners, this offering will save them money, time, and free up precious resources while taking into consideration all that is required to both develop and consistently deliver this type of training on their own. Training continues to be an important component of their workforce development efforts as well as community benefit plans. It is estimated that savings could range from hundreds of thousands to millions of dollars depending on the organization size. Beyond leveraging NHA's position to pull together the foremost teams

of experts in the industry, this also represents a tremendous opportunity to leverage and share training development and delivery costs and resources with many other NHA members.

## **Section IV: Financial Investment to Create the Curriculum**

Budget items to be considered include:

One-time costs:

- Curriculum Development (8 Modules)

- \$125,000 to \$175,000 per module

*(Estimated range of total costs: \$1 million to \$1.4 million)*

Re-occurring costs:

- Learning Management System/Platform

- Certification Capability

- Staffing/Trainers

- Marketing/Awareness Campaigns

- Logistics and Content Delivery Tools/Methods

## **Section V: Proposed Vote for Board**

We propose that the Board directs the NHA staff to:

- 1) Solicit bids to hire external support to develop the “Hydropower System Principals” certification course as described in this document;
- 2) Seek commitments/pre-sell units to cover Curriculum Development and related program costs;
- 3) Enter into contracts to develop the “Hydropower System Principals” certification course if, at the discretion of the CEO, we have secured a sufficient level of pre-commitments;
- 4) Submit a 2024 budget proposal that incorporates anticipated expenses and revenues such that NHA would recover external expenses in no longer than two years; and
- 5) Continue to leverage the Ad-Hoc Advisory Group.