NHA Board of Directors Meeting Q2 2023 Agenda

July 17-18, 2023

July 17, 2023

	1:30-1:35	Introductions / Safety	Mike Haynes NHA Chair	
Item 1	1:35-1:40	Consent Agenda / UpdatesMay 2023 Board Call MinutesStatus of Action Items	Mike Haynes	Approval
Item 2	1:40-2:00	 CEO Report Personnel updates Progress report on 2023 Strategic Priorities Uncommon Dialogue update 	Malcolm Woolf NHA CEO	Information Only
Item 3	2:00-2:15	Treasurer's ReportQ2 2023 FinancialsQ2 Membership and nondues revenue update	Thomas St. John Treasurer Marla Barnes VP, Member and Indust Engagement	Information Only
Item 4	2:15-3:00	Allocating Uncommitted NHA Funds	Thomas St. John	Feedback
Item 5	3:00-3:15	Establishing 2024 Dues	Thomas St. John	Approval
	3:15-3:30	BREAK		
Item 8	3:30-4:30	Defining "Domestic Content" Under Inflation Reduction Act	Michael Purdie Director of Reg Affairs and Markets	Approval
Item 6	4:30-5:00	License Reform Congressional Outlook	Matthew Allen Director of Leg Affairs	Feedback

Item 9	5:00-5:15	"More Than Just Clean Energy": Next Steps for NHA's Digital Ad Campaign - Preview of 2023 Campaign - Options for 2024 Campaign	Malcolm Woolf	Feedback
Item 10	5:15-5:30	U.S. DOE Manufacturing Supply Initiative	Chris Hayes Senior Advisor, Technica Programs and Training	Feedback
	6:30-9:00	Board Reception and Dinner Barcelona Wine Bar – 14 th Street 1622 14th St NW Washington, DC 20009 Not walking distance from NHA office.		
		Not waiking distance from NIA office.		
<u>July 18</u>	<u>, 2023</u>			
	8:00-8:30	Breakfast		
Item 12	8:30-9:00	DEI Moment: Leading Our Industry to Look More Like Our Customers	Marycella Dumlao	Information only
Item 11	9:00-9:30	Raising the Industry's Ambition	Malcolm Woolf	Information Only
Item 13	9:30-9:45	Bipartisan Infrastructure Law		
		- DOE 240s Grant Program	Jeff Leahey SMI	Feedback
		 Other federal funding opportunities 	Anthony Laurita NHA Program Manager	Feedback
Item 14	9:45-10:00	Incentivizing Refurbishments: Application of Treasury's "80-20" Rule to Hydropower	Michael Purdie	Feedback
Item 15	10:00-10:15	NHA's "3R" Tax Proposal to Maintain Existing Hydropower and Pumped Storage	Matthew Allen	Feedback
	10:15-10:30	BREAK		
Item 16	10:30-11:00	Reinvigorating NHA's Technical Programming - HTC Update - Educational Opportunities	Chris Hayes	Feedback

Item 17 11:00-11:20	Rolling Out Op-Ex Reimagined	Chris Hayes	Feedback
Item 18 11:20-11:50	Methane, 401 and other Regulatory Issues	Michael Purdie / Anthony Laurita	Feedback
Item 19 11:50-12:00	NHA Events - Location for CC 2025 - Preview of CC 2023	Francesca Hadjimichael Director of Meetings an Marla Barnes	Feedback
Item 20 12:00-12:10	New Business		
Item 21 12:10-12:30	Executive Session		
12:30	Adjourn		

NHA Board of Directors' Meeting July 17-18, 2023

I'm looking forward to seeing (most of you) next week in Washington, DC. A TEAMs link will be available for those unable to join us in person. This memorandum provides background information for the items on the agenda.

Agenda Item 1, Consent Agenda and General Updates

Recommended Actions: Approval

- Approve the May 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, 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 provide updates on staffing, the Uncommon Dialogue, and other new developments.

Agenda Item 3, 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 May 2023, including the latest information on NHA's investments and reserves.

Attached for your information is:

- NHA's July 2023 Treasurer's Report, covering through May 30, 2023,
- NHA's Statement of Financial Position and Operating Income Statement, as of May 30, 2023,
- NHA's July 2023 Membership Report, and
- NHA's July 2023 Q1 Non-Dues Revenues Report.

Agenda Item 4, Allocating Uncommitted NHA Funds

Recommended Action: Feedback

Background: In approving NHA's 2023 budget last December, the Board expressed a desire to bring NHA back into compliance with the organization's liquid asset policy, which requires that NHA maintain an operating reserve balance of 6-12 months.

NHA currently forecasts ending CY 2023 \$377K ahead of budget. The attached memo, "Allocating Uncommitted NHA Funds," dated July 5, 2023, provides additional detail about NHA's strong financial position. The memo also lays out a number of options and makes recommendations for how best to maximize value for NHA's membership.

Attached for your information is:

Memo to Board, "Allocating Uncommitted NHA Funds," July 5, 2023

Agenda Item 5, Establishing 2024 Membership Dues

Recommended Action: Approval

Background: NHA traditionally establishes its membership dues for the following year in midsummer to provide ample notice to our members, who have varying budget cycles. Other than keeping up with inflation, NHA staff are not recommending any fundamental changes to NHA's membership dues structure at this time.

Agenda Item 6, Legislative License Reform Outlook

Recommended Action: Informational

Background: This session will update the Board on our progress to advance a legislative reform package to improve hydropower licensing, relicensing, and license surrender. With bills currently working their way through both the Senate and the House, Matthew Allen, NHA's new legislative director, will lead this session to provide an update on our legislative efforts. This session will also provide context in advance of our invited White House and legislative guest speakers.

Agenda Item 7, White House and/or Congressional Guest Speaker

Recommended Actions: Information only

Background: To take advantage of the Board's final meeting this year in Washington, D.C., NHA has invited senior staff from the White House Climate Office, the Senate Energy and Natural Resources Committee, and the House Energy and Commerce Committee to join us (in separate sessions) to share their perspectives on energy licensing reform. While we are still finalizing their participation, we look forward to these discussions on one of NHA's top legislative priorities.

Agenda Item 8, Defining Domestic Content Under the Inflation Reduction Act

Recommended Actions: Information only

Background: The Inflation Reduction Act creates a 10% adder to the Production Tax Credit (e.g., from 3 cents/kWh to 3.3 cents/kWh) or a 10% adder to the Investment Tax Credit (e.g., from 30% to 40%) for taxpayers who have projects that satisfy the requirements for the "Domestic Content Bonus Credit," as defined under Treasury/IRS Notice 2022-38.

This session will focus on what recommendations NHA should make to Treasury/IRS on July 20th. Senior Treasury staff reached out directly to NHA because they recognized the new guidance does not include hydropower. The guidance raises a number of challenging issues, including what level of onsite direct labor and materials costs can be included in the domestic price calculation. Attached is a memo, prepared by Michael Purdie, providing background on this issue, including several different approaches that appear to be preferred by different NHA member companies.

NHA staff have been working with our members, including the Deep Dive Policy Team, to develop a consensus approach. Having rescheduled the Treasury meeting multiple times, however, the Board may need to make the final decision about NHA's recommendations in advance of the July 20th meeting.

Attached for your information is:

 Memo to Deep Dive Policy Team, "Feedback Needed for Recommendations to Treasury with respect to Defining the Domestic Content of U.S. Hydropower Manufactured Products," June 30, 2023.

Agenda Item 9: NHA's Digital Ad Campaign

Recommended Action: Feedback

Background: NHA successfully launched its first ever "More Than Just Clean Energy" digital ad campaign in 2022 in the southeast and northeast (where we were successfully able to fundraise). In total, the ad received over 38M digital media impressions, reaching nearly 2M millennials (aged 25-40) multiple times during its 6-week run. The digital media initiative resulted in a statistically significant + 6% increase in strong positive perceptions of hydropower's community impact.

Building on this success, this session will preview and solicit feedback on NHA's 2023 digital ad, "Clean Living," which will highlight how hydropower complements wind and solar to create a 24/7, reliable, carbon-free grid. We will also seek feedback on how NHA should structure this campaign in 2024 and beyond.

Agenda Item 10, U.S. DOE's Effort to Grow U.S. Hydropower Manufacturing

Recommended Action: Feedback

Background: What would it take to attract major new investment in U.S. based hydropower manufacturing?

At this session, Chris Hayes will update the Board on DOE's progress to date in developing recommendations for Secretary Granholm and the White House. As you may recall, NHA worked with DOE to host a "Hydropower Manufacturing Roundtable" with Deputy Secretary David Turk on May 8, just before WaterPower Week's opening plenary session.

Agenda Item 11, White House and/or Congressional Guest Speaker

Recommended Actions: Information only

Background: As noted previously, NHA has invited senior staff from the White House Climate Office, the Senate Energy and Natural Resources Committee, and the House Energy and Commerce Committee to join us (in separate sessions) to share their perspectives on energy licensing reform. While we are still finalizing their participation, we look forward to these discussions on one of NHA's top legislative priorities.

Agenda Item 12, DEI Moment: Leading our Industry to Look More Like Our Customers

Recommended Actions: Feedback

Background: Nominations for NHA's 2024 Board open on July 17th. This session will explore what additional steps the Board should take, if any, to encourage a diverse slate of candidates to apply.

In addition, NHA has also invited Chris Nichols, executive director of Renewables Forward (www.renewablesforward.org), to share how her organization is working to promote DEI in the clean energy sector and provide tools and resources for education and pipeline support, hiring, and DEI in the workplace.

Agenda Item 13, Bipartisan Infrastructure Law

Recommended Action: Feedback

Background: DOE is currently reviewing the industry's applications for the unprecedented \$750M+ in federal grants available under the Inflation Reduction Act. Billions of additional grants and loans are also available from other federal agencies. This short session will provide an opportunity to discuss where things stand, what's next, and how NHA can help our members take full advantage of this historic influx of federal support.

<u>Agenda Item 14</u>, Incentivizing Refurbishments: Application of Treasury's "80-20" Rule to Hydropower

Recommended Action: Feedback

Background: The hydropower industry has a unique opportunity to enhance and preserve the existing fleet - without the need for Congressional action.

The U.S. Treasury/IRS needs to issue updated guidance on their existing "80/20" rule in light of the IRA's new, technology-neutral tax credit. The 80/20 rule allows existing facilities to claim the ITC/PTC tax credits as long as the refurbishment or renovation satisfies the "repowering" standard. This standard, historically governing repowering of existing wind energy facilities, states that a "facility may qualify as originally placed in service even though it contains some used property, providing the fair market value of the used property is not more than 20% of the facility's total value."

In this session, Michael Purdie will share the steps NHA has taken to evaluate the application of the 80/20 rule to the hydropower industry and what to expect in the coming months.

Attached for your information is:

• Memo to NHA Board, "Rare Opportunity to Advocate for Treasury to Interpret Major Hydro Refurbishments As Qualifying for ITC/PTC Tax Credits/Direct Pay," July 9, 2023.

Agenda Item 15, NHA's "3R" Tax Credit Proposal to Maintain and Expand Existing Hydropower and Pumped Storage

Recommended Action: Feedback

Background: Congress will eventually need to tackle tax issues again and, when they do, NHA wants our "3R" tax credit proposal to have the bipartisan support it needs to get over the finish line. We continue to work with our legislative champions, Senators Cantwell and Murkowski, to broaden our base of support. At this session, Matthew Allen will share an update on our progress to date and further steps to anticipate.

Agenda Item 16, Reinvigorating NHA's Technical Programming

Recommended Action: Feedback

Background: In just his first few months, Chris Hayes has already taken significant steps to reinvigorate NHA's Hydropower Technical Community and Waterpower Innovation Council. In additional to providing updates, Chris will also share the results of his "listening sessions" and explore with the Board potential opportunities that he has identified to address gaps in the industry's existing technical training offerings.

Agenda Item 17, Roll Out of Op-Ex Reimagined

Recommended Action: Feedback

Background: The newly reimagined Op-Ex tool is now available! Check it out at

www.hydro.org/opex-operational-excellence.

In addition to sharing the tool with the Board, Chris Hayes will seek guidance from the Board on how best to roll out the new tool and encourage greater utilization of this valuable resource.

Agenda Item 18, Regulatory Issues – 401, Methane, and Other Top Hits

Recommended Action: Feedback

Background: This session will update the Board on a host of regulatory issues.

First, litigation continues over the Trump Administration's 401 rule, notwithstanding the success of NHA (and others) at the U.S. Supreme Court in preserving the rule in effect until a replacement is adopted. This session will update the Board on the status of the current ongoing litigation over the legality of the Trump-era 401 rules, preview the Biden Administration's efforts, and flag the potential need for additional litigation in the coming year.

Second NHA continues to push back against allegations that potential emissions of methane from reservoirs can be attributable to hydropower operations. This session will provide an update on these efforts.

Agenda Item 19, Connections: Waterpower Week, Clean Currents, & Regional Mtgs

Recommended Action: Feedback

Background: Building on the success of Waterpower Week 2023, Francesca Hadjimichael Blanco and Marla Barnes will look ahead to our plans for our remaining 2023 Regional Meetings and for Clean Currents 2023, as well as update the Board on the final city selection for Clean Currents 2025.

Agenda Item 20, 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.

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Agenda Item 21, 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: July 17, 2023

RE: NHA Treasurer's Report

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

SUMMARY:

Through May, NHA remains in a strong financial position having collected 92% of budgeted annual revenue and incurring 28% of annual 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 \$1.5M held in the operating account. The investment account holds \$3.64M, up from \$2.97M this time last year. Receivables are up and accounts payable are down compared to the same period in 2022.

SIGNIFICANT ITEMS TO NOTE:

Membership and G&A – Revenue is strong with 95% or \$3.4M of budgeted revenue collected through May.

Policy Advocacy – Policy Advocacy revenue has been forecast up an additional \$100K 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, which should start by September). Other revenue comes from pledges of Powerhouse Sponsorships and members joining the Deep Dive Policy Group. We expect expenses to remain close to the original budget for 2023.

Clean Currents – Five months out from The Clean Currents conference and trade show, NHA has brought in 68% of its budgeted revenue. As expected, expenses are considerably under budget, but we will see these come in line as we get closer to the meeting in October.

Water Power Week – The Waterpower Week meeting revenue has exceeded revenue estimates by \$88K, with expenses up only \$5K. Overall, the event is expected to generate \$200K in net profit, \$83K more than budgeted. Expenses have reached 56% of budget through May (as we are still finalizing hotel, food, and beverage invoices). 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 originally budgeted in 2023, resulting in an increase in revenue and expenses, but ultimately forecast to add another \$10K to the bottom line by year end.

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. As reflected in the forecast, an additional \$100K remains unallocated.

OTHER NOTES:

Investments are relatively flat so far this year. Consistent with NHA's investment policy, only 18% of NHA's financial assets held in the brokerage account are invested in equities.

NHA's liquid asset balance was \$5.2M at the end of May, 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.



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

	May 31, 2023	
ASSETS		
Cash and cash equivalents Investments Accounts receivable Prepaid expenses Property and equipment, net Other assets TOTAL ASSETS	\$ 1,564,613 3,636,136 886,825 84,218 52,639 957,824 7,182,255	\$ 1,720,061 2,970,457 516,778 78,171 275,086 90,768 5,651,321
LIABILITIES		
Accounts payable and accrued expenses Payroll liabilities Deferred rent TOTAL LIABILITIES	85,148 92,967 1,004,996 1,183,111	212,906 59,903 681,618 954,427
NET ASSETS		
Ending Net Assets TOTAL NET ASSETS	5,999,144 5,999,144	4,696,894
TOTAL LIABILITIES AND NET ASSETS	\$ 7,182,255	\$ 5,651,321



National Hydropower Association STATEMENT OF ACTIVITIES - UNAUDITED for the five months ended May 31, 2023

	Jan-May		
	2023	2023	2023 Annual
	Actuals	Forecast	Budget
REVENUE			
Membership and G&A	3,235,362	3,423,750	3,398,319
Policy Advocacy	212,417	346,000	235,000
Tech Insights and Public Affairs	233,000	233,000	-
Clean Currents	1,328,309	1,965,000	1,964,674
Waterpower Week	483,190	483,448	395,000
Other Events	178,918	230,000	185,000
TOTAL OPERATING REVENUE	5,671,196	6,681,198	6,177,993
EXPENSES			
Salaries, Benefits, and Temp Help	891,925	2,325,360	2,292,041
Membership and G&A	300,837	909,244	1,003,200
Policy Advocacy	244,699	927,362	986,875
Tech Insights and Public Affairs	122,705	874,240	669,800
Clean Currents	124,128	1,324,588	1,324,228
Waterpower Week	155,277	283,291	278,225
Other Events	36,473	90,735	54,711
TOTAL OPERATING EXPENSES	1,876,044	6,734,820	6,609,081
CHANGE IN OPERATING NET ASSETS	3,795,151	(53,622)	(431,088)
Investment Activity, Net	(32,734)		
TOTAL CHANGE IN NET ASSETS	3,762,417	(53,622)	(431,088)
TO THE CHARGE EVIDENT HODELD	3,702,117	(55,022)	(151,900)

2023 Membership Update

As of July 7, 2023, Page 1 of 2

2023 By the Numbers

Overall # of Organizations	328
# of New Members so far (list on page 2)	24
Collected Dues	\$3,259,544 (\$191K of this was collected since last board meeting)
# of Dropped Members so far	5

Actions for 2023 Q3

- Continue to collect dues payments for 2023 (~\$156,000) left to collect from ~40 organizations); on track to meet membership dues 2023 budget
- 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 2023:
 - o ABB
 - Alliant Energy
 - Avista (Chris Hayes has a commitment from them to join)
 - Dairyland Power Cooperative
 - Los Angeles Department of Water and Power
 - Oklahoma Municipal Power Authority
 - Portland General Electric
 - Western Area Power Administration
 - 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 July 7, 2023, Page 2 of 2

Member Organizations Joining in 2023

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

3U Technologies LLC*
Agilitas Energy
Anchor Coalition
Bechtel
California State Polytechnic San Luis Osbispo
Chalmers & Kubeck (C&K)
City of Sturgis, Michigan*
Douglas County PUD
El Dorado Irrigation District
Gatto Construction Services
Global Diving and Salvage
Global Infrastructure Associates
Hull Street Energy*
Hydro Green Energy*
Hydro Tech Inc.
Keller*
KGS Group International Inc. Usa
L&H Industrial
LaBella
LAPCO (Lynchburg Air Preheater Corp.)
Petrotech, Inc.
Techno Hydro
Thorndike Energy LLC
Tide Mill Institute



Non-dues Revenue Report 2023 Budget to Actuals As of July 7, 2023

Waterpower Week	Budget	Actuals to date	% of Actuals to Budget
Reg Revenue	\$320,000.00	\$404,948.00	127%
Reg #	460	570	124%
Sponsorship	\$75,000.00	\$78,500.00	105%
Total Revenue	\$395,000.00	\$ 483,448.00	122%
Total Expenses*	\$ 278,225.00	\$ 282,320.00	101%
Total Net	\$116,775.00	\$ 201,128.00	172%

*Note- Expenses approximate, not final

Clean Currents	Budget	Actuals to date	% of Actuals to Budget	
Reg Revenue	\$400,000.00	\$ 28,350.00	7%	
Reg #	1,200	114	10%	last year this time = 128 registrants for 2023, 19 (or 17% of all registrants) are asset owners
Sponsorship	\$375,674.00	\$233,370.00	62%	includes \$45K paid from Duke, AMP collected \$93,675 (41% of actuals)

Exhibits	\$1,189,000.00	\$1,215,480	102%	collected \$655,975 (54% of actuals) 183 exhibitors (48% are NHA members)
		\$		
Total Revenue	\$1,964,674.00	1,477,200.00	75%	
Total Expenses*	\$1,324,425.00			
	\$			
Total Net	640,249.00			

Regional Meetings	Budget	Actuals to date	% of Actuals to Budget
	\$	\$	
Reg Revenue	65,000.00	52,095.00	80%
Reg #	560	345	62%
	\$	\$	
Sponsorship	120,000.00	147,000.00	123%
	\$	\$	
Total Revenue	185,000.00	199,095.00	108%
Total Expenses*	\$51,836.00	\$29,142.18	
Total Net	\$133,164.00		

POWERHOUSE	Budget	Actuals to date	% of Actuals to Budget
Sponsorship	\$100,000.00	\$71,417.00	71%
Total Revenue	\$100,000.00	\$71,417.00	71%
Total Expenses*	\$36,100.00		
Total Net	\$63,900.00		

Career Center Job Board	Budget	Actuals to date	% of Actuals to Budget
Revenue	\$8,500.00	3,742.40	44%
TOTAL	\$8,500.00	\$3,742.40	44%

Total Expenses		
Total Net		

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

Collected \$112K

Digital Ad Campaign	Budget	Actuals to date	% of Actuals to Budget
NHA Budget	\$300,000.00	\$300,000.00	100%
Donations from members		\$233,000.00	
Total Revenue	\$300,000.00	\$533,000.00	
Total Expenses			
Total Net			

Grand Total -		\$	
Revenue	\$3,063,174.00	2,867,452.40	94%

To: NHA's Board

From: Malcolm Woolf

Date: July 10, 2023

Subject: Allocating NHA's Uncommitted 2023 Funds

This memo provides recommendations for how best to allocating 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.

Context: NHA currently forecasts ending CY 2023 \$377K ahead of budget.

As you will recall, in approving NHA's 2023 budget last December, the Board expressed the desire to bring NHA back into compliance with the organization's liquid asset (reserve) policy, which requires that NHA maintain an operating reserve balance of 6-12 months.

To achieve this goal, the Board created a "strategic investment" line item that would reduce NHA's reserves to roughly 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. Nevertheless, an additional \$100K remains unallocated.

In addition, NHA anticipates exceeding the 2023 budget due to:

- 1. Successfully earning a \$100K award from the U.S. Department of Energy for Uncommon Dialogue related activities (expected to start before September),
- 2. Surpassing our net profitability goals for WPW and other programs, and
- 3. Maintaining strong cost controls.

Together, we anticipate ending 2023 well in excess of NHA's 6–12 month reserve policy. Specifically, we expect to run a small deficit of (\$53,622), which is \$377K ahead of the 12-month reserve goal of (431,088).

NHA Staff Recommendations - \$332K (\$377K in excess)

- NHA salary/bonus pool NHA's salary/bonus pool has not kept up with inflation. NHA is hiring a firm to conduct a more systematic salary comparison for 2024 budget purposes. In the meantime, I recommend additional funds to more properly recognize staff for their successes over the last several years.
 - o Recommendation: \$132K
- Pumped Storage / External Strategic Engagement Staff Position The opportunities for pumped storage are greater than ever, yet the NHA Policy Team has lacked the bandwidth to give the Pumped Storage Committee the attention needed ever since Cameron Shilling left. In addition, NHA has the opportunity to raise our policy ambition by more systematically engaging with external groups at the federal and state level, such as the Western Governors Association, the National Conference of State Environmental Legislators, the American Green Bank Consortium, state utility and environmental regulators, and other potential allies and clean energy thought leaders.
 - o Recommendation: \$100K
- NHA's digital ad campaign NHA's "More than Just Clean Energy" digital ad campaign has raised to date \$533K this year, including \$300K from NHA. These funds will be used to run regional campaigns in the Northeast, Southeast, and Midwest. Additional funds would enable NHA to reach a broader audience and increase our effectiveness.
 - Recommendation: \$50K
- Trump Administration 401 litigation expenses NHA hired Troutman Pepper to represent the association in defense of the Trump Administration's 401 rule. We agreed to a cap of \$150K for work before the District Court and U.S. Court of Appeals. Troutman voluntarily agreed to continue the work, successfully defending the rule before the US Supreme Court and the various remands that have followed. In total, the fees exceed \$300K. While all parties understand that NHA is under no legal obligation, paying a portion of the \$150K remaining balance seems appropriate in light of the work performed and results obtained.
 - o Recommendation: \$50K

Other Potential Options -

- Initiate NHA Academy Certification Program Through Chris Hayes' "listening tour," NHA has identified a number of gaps in the industry's existing technical training offerings. Following the lead of many other associations, NHA could develop a continuing education curriculum for industry employees. We are seeking a subset of the Board to help explore this opportunity and develop recommendations in advance of the October Board meeting. If approved, NHA could start curriculum development in Q4 of 2023.
- Contribute to "Renewables Forward" as a DEI Central Coordinating Body A group of clean energy organizations have invited NHA to join with the wind and solar industries to restructure "Renewables Forward" as a central coordinating body for DEI related work (see https://www.renewablesforward.org/). While the request for \$200K per association may be beyond NHA's means, participation at some level is worth consideration.
- Biden 401 litigation expenses The final Biden Administration 401 rule is expected to be promulgated later this year. Given the proposal, NHA anticipates a legal challenge. The organization has already budgeted \$75K in the 2023 budget for this litigation expense, anticipating additional costs in 2024. To be conservative however, NHA could dedicate additional funds to this effort.
- Additional NHA Administrative Support As NHA's activities expand, we find the
 organization increasingly relying on external contractor support for core NHA functions,
 ranging from event registration to graphic design. Adding additional administrative support
 would enable NHA to reduce these external costs in 2024.
- Assume responsibility for work force development The Hydropower Foundation
 historically has taken the lead on work force development activities. However, given the
 industry's serious work force challenges, the Board could direct NHA to be more directly
 engaged. Since NHA does not currently have any staff with work force development
 expertise, we could use the funds to hire full time staff to more aggressively promote
 waterpower at colleges, trades, veterans, etc.
- <u>Forego 2024 membership dues increase</u> Like most organizations, NHA's membership dues increase each year to keep pace with inflation (typically between 3-5% in recent years). The Board could choose to use the unallocated funds to forego the 2024 membership dues increase. Foregoing a dues increase would be equivalent to \$150K @ 5%.
- Additional funds for reserves The Board can also choose to save all or some of the unallocated funds for another day.

To: NHA Deep Dive Policy Team

From: Michael Purdie, Director of Regulatory Affairs and Markets

Date: June 30, 2023

Subject: Feedback Needed for Recommendations to Treasury with respect to Defining the Domestic Content of U.S. Hydropower Manufactured Products

On May 12, Treasury/IRS released Notice 2022-38 – Domestic Content Bonus Credit Guidance. As a result of the Inflation Reduction Act, this credit provides a 10% adder to the Production Tax Credit (e.g., from 3 cents/kWh to 3.3 cents/kWh) or 10 percentage point adder to the Investment Tax Credit (e.g., from 30% to 40%). A taxpayer could increase their credit base from a small amount (i.e., 6% in the ITC) to a higher value (i.e., 30% for the ITC) if they pay prevailing wages and utilizes apprenticeships. They could increase their credit base further if they meet the requirements of the domestic content bonus credit.

Immediately after releasing the Notice, senior staff at the Treasury reached out directly to NHA because they recognized they did not incorporate our unique fact patterns and hydropower was not included in Table 2. Therefore, it is incumbent on the industry to provide useful recommendations, otherwise Treasury may adopt unworkable approaches. Also, NHA needs to engage to retain its credibility for future advocacy (e.g., 80/20 rule applicability to hydropower).

NHA is meeting with Treasury/IRS on July 20th to provide input and education on the unique fact patterns for hydropower that they need to address in modifying the guidance that could become the regulations for these tax credits.

NHA has identified three specific issues and is seeking feedback on each, but emphasis on member feedback for items 2 and 3 in particular:

1) The guidance requires a taxpayer (i.e., the project owner applying for the tax credit) to certify direct labor and materials costs paid or incurred by the *manufacturer(s)* in the production of manufactured components. This nuance will flow to the manufacturers and require that they certify the values they provide comply with the IRS regulations on the topic. This reading will subject U.S. manufacturers (who would not receive the bonus credit) to legal and financial risks. In addition, it creates significant administrative burden on the taxpayer to certify a credit based on internal, and potentially confidential, costs of a third party.

NHA's recommended path forward is for Treasury/IRS to modify the guidance where the calculation is based off the *price* the taxpayer incurs for manufactured components.

This concept is consistent with the tax code and Federal Transit Administration's (FTA) Buy America regulations which are referenced elsewhere in the Inflation Reduction Act and Notice 2023-38. NHA's recommended path forward is also consistent with the views of other technologies eligible for credits under the Inflation Reduction Act.

2) To qualify for the Domestic Content Bonus, the taxpayer must achieve a "Domestic Cost Percentage" of US manufactured products meeting or exceeding the applicable 40-55% requirement for their project. The Domestic Cost Percentage is the ratio of the cost of all US manufactured products versus all manufactured products.

Several different approaches have been suggested by NHA members. The underlying question is, what level of onsite direct labor and materials costs can be included in the domestic price calculation?¹

- a. One approach is a bright-line test that would require all manufacturing to occur offsite (presumably beyond the FERC boundary) for the purposes of manufactured components. Any work that is onsite would be considered construction and/or assembly. This delineation keeps site work separate and distinct from the manufacturing of components that occurs in offsite shops.
- b. A second approach would delineate a set of activities that qualify as manufacturing whether they take place at a factory or on-site at the hydropower facility (due to transportation or other issues). This approach rests on an interpretation of FTA Buy America regulations as defined in 49 CFR 661.² The Manufacturing Process in this case means:

...the application of processes to alter the form or function of materials or of elements of the product in a manner adding value and transforming those materials or elements so that they represent a new end product functionally different from that which would result from mere assembly of the elements or materials.³

The FTA provides the following examples comprising manufacturing processes:

¹ To qualify for the credit, the Applicable Project Component utilizing the Manufactured Product requirement must have costs of domestic sourced products as percentage of Applicable Project Components be greater than the Applicable Percentage (i.e., 40% for construction starting in 2023 rising to 55% for construction starting in 2026). This is separate from the Applicable Project Components utilizing the Steel and Iron Requirement.

² A component may be manufactured at the final assembly location if the manufacturing process to produce the component is an activity separate and distinct from the final assembly of the end product. 49 CFR 661.11(d).

³ 49 CFR 661.3

"The processes of alteration may include forming, extruding, material removal, welding, soldering, etching, plating, material deposition, pressing, permanent adhesive joining, shot blasting, brushing, grinding, lapping, finishing, vacuum impregnating, and, in electrical and electronic pneumatic, or mechanical products, the collection, interconnection, and testing of various elements." Final Rule, Buy America Requirements, 56 Fed. Reg. 926, 929 (Jan. 9, 1991).

Based on this interpretation, onsite construction would not be considered manufacturing. Consistent with the FTA Buy America Rules, onsite manufacturing would be considered eligible work if it can't occur at the project construction site but for the manufacturing process that is separate and distinct from assembling of the end product.

- c. A third, hybrid approach would recognize on-site activities as manufacturing if they meet the existing FTA federal definitions and relate to the process of putting the Prime Mover components together for a final product (e.g., as opposed to assembly and construction activities performed by a general contractor). This approach would recognize the different roles played by manufacturers and construction companies onsite.
- 3) The final issue results from Treasury/IRS creating two levels of components (i.e., Applicable Project Component and Manufactured Product Component). By creating a new definition, "Manufactured Product Component⁴," that is in some form subordinate to "Applicable Project Components" (that is defined in 49 CFR 661.3 under "Component"), Treasury/IRS is asking the taxpayer to certify the origin of their Manufactured Product Components. The Domestic Content Bonus explicitly allows for foreign sourced subcomponents to be used in Manufactured Product Components so long as the manufacturing process for the Manufactured Product Component takes place in the United States.
 - a. The IRS and Treasury have published some specific "Safe Harbors" for wind, solar and battery projects in Table 2 of the draft guidance (see appendix). This will allow taxpayers for these projects to clearly understand the applicability of the domestic content guidance to typical elements of those project scopes. No

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⁴ A Manufactured Component refers to anything that contributes to an Applicable Project Component that is a Manufactured Product. This can include both manufactured and unmanufactured items.

⁵ An Applicable Project Component refers to anything that contributes to an Applicable Project. This can include steel, iron, a Manufactured Product, and more.

such information has been provided for hydropower or pumped storage hydropower projects.

i. NHA staff requests member assistance on the inputs to Table 2.

NHA appreciates the differing views on how this guidance could be utilized for the benefit of the hydropower industry. Please reach out to NHA staff for questions and clarification.

Appendix

Table 2 from Notice 2023-38

Table 2 – Categorization of Applicable Project Components

Applicable Project	Applicable Project Component	Categorization
Utility-scale	Steel photovoltaic module racking	Steel/Iron
photovoltaic system		
	Pile or ground screw	Steel/Iron
	Steel or iron rebar in foundation (e.g.,	Steel/Iron
	concrete pad)	
	Photovoltaic tracker	Manufactured Product
	Photovoltaic module (which includes	Manufactured Product
	the following Manufactured Product	
	Components, if applicable:	
	photovoltaic cells, mounting frame or	
	backrail, glass, encapsulant,	
	backsheet, junction box (including	
	pigtails and connectors), edge seals,	
	pottants, adhesives, bus ribbons, and	
	bypass diodes)	
	Inverter	Manufactured Product
Land-based wind facility	Tower	Steel/Iron
	Steel or iron rebar in foundation (e.g., spread footing)	Steel/Iron
	Wind turbine (which includes the	Manufactured Product
	following Manufactured Product	
	Components, if applicable: the	
	nacelle, blades, rotor hub, and power	
	converter)	
	Wind tower flanges	Manufactured Product
Offshore wind facility	Tower	Steel/Iron
	Jacket foundation	Steel/Iron
	Wind tower flanges	Manufactured Product
	Wind turbine (which includes the	Manufactured Product
	following Manufactured Product	
	Components, if applicable: the	
	nacelle, blades, rotor hub, and power	
	converter)	
	Transition piece	Manufactured Product
	Monopile	Manufactured Product
	Inter-array cable	Manufactured Product
	Offshore substation	Manufactured Product
	Export cable	Manufactured Product

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Battery energy	Steel or iron rebar in foundation (e.g.,	Steel/Iron
storage technology	concrete pad)	
	Battery pack (which includes the	Manufactured Product
	following Manufactured Product	
	Components, if applicable: cells,	
	packaging, thermal management	
	system, and battery management	
	system)	

To: NHA Board of Directors

From: Michael Purdie, Director of Regulatory Affairs and Markets

Subject: Rare Opportunity to Advocate for Treasury to Interpret Major Hydro Refurbishments

as Qualifying for ITC/PTC

Date: 7/10/2023

As the Department of Treasury and Internal Revenue Service ("Agencies") are implementing the Inflation Reduction Act ("IRA"), the Agencies will have to consider how to address the 80/20 rule in the Technology Neutral Production Tax Credit and Investment Tax Credit ("Credits"). The Credits will become effective January 1, 2025. These Credits are designed to incentivize new, carbon-free electricity. The 80/20 rule allows for existing facilities to claim the Credits as a new resource, so long as the refurbishment or renovation satisfies the "repowering" standard. This standard, historically governing repowering of existing wind energy facilities, states that a "facility may qualify as originally placed in service even though it contains some used property, provided the fair market value of the used property is not more than 20% of the facility's total value." In other words, if cost of the new components is greater than 80% of the facility's fair market value, then the taxpayer can elect to claim either the Production Tax Credit or Investment Tax Credit as a new facility. With the advent of elective pay, tax-exempt entities could also benefit from these provisions.

The hydropower industry has a unique opportunity to enhance and preserve the existing fleet - without the need for Congressional action. The Agencies will soon issue new guidance on how to reform their existing 80/20 rule in light of the IRA's new technology-neutral tax credit. With a significant amount of the industry up for relicensing in the next decade, plus ongoing equipment capital spend, there is a real financial benefit to this rule for NHA's members.

NHA has contracted with Bracewell to evaluate the industry's options and assess their relative strength from a Treasury perspective. The industry needs to propose what components count towards the fair market value (i.e., 80% of "what"?). Attached are two appendices. Appendix 1 from Bracewell provides further detail on the 80/20 rule and its potential impact for the industry. Appendix 2 is the final document drafted by Bracewell on potential paths for the industry.

After further discussion, NHA is taking steps in parallel. First, NHA is soliciting member feedback on which of the options in Appendix 2 is the best path forward. Second, NHA is finalizing a Request for Proposal for outside counsel to support NHA's advocacy and development of an industry position.

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/s/ Michael Purdie____

Michael Purdie Director of Regulatory Affairs and Markets

The Inflation Reduction Act of 2022 created a technology-neutral investment tax credit, or ITC, and production tax credit, or PTC, for generation facilities that are placed in service between 2025 and 2033 (at the earliest), provided that a facility's anticipated greenhouse gas emissions rate is not greater than zero.

Newly-constructed hydroelectric facilities are expected to qualify for the new ITC and PTC. By contrast, an existing hydroelectric facility that is renovated, refurbished, and/or improved must satisfy a "repowering" standard provided by the IRS and Treasury Department to qualify for these credits. This standard – often referred to as the 80/20 test – requires that, following construction, the fair market value of the remaining original property in the facility be not more than 20 percent of the facility's aggregate fair market value (that is, the sum of (1) the capitalized costs of the renovation and (2) the fair market value of any remaining original property). Put another way, the new capitalized costs incurred in connection with the renovation, refurbishment, and/or improvement must represent at least 80 percent of the aggregate fair market value of the post-construction facility.

The IRS and Treasury Department have not clarified which components of a renovated, refurbished, or improved facility must be accounted for in the 80/20 test. This lack of guidance is expected to create significant uncertainty for owners of hydroelectric facilities seeking the ITC or PTC in connection with renovation projects.

Suppose, for instance, that the owner of a hydroelectric facility is planning to renovate and/or replace certain components of the facility's turbines and generator. The owner believes that the project will cost \$18 million and, following completion of the project, the fair market value of the remaining original components of the turbines and generator will be \$2 million. In this case, the fair market value of the original components within the renovated facility would equal 10 percent of the aggregate fair market value of the post-construction facility (that is, \$2 million/\$20 million), and therefore the project would satisfy the 80/20 test.

There is no available guidance, however, to support the owner's position that the turbines and generator, but no other components, should be accounted for in the 80/20 test. As a result, in an audit, the IRS could argue that the fair market value of other original components of the facility should be included in the 80/20 test, even if these components were not renovated in connection with the project. For instance, suppose the IRS successfully argues that the original forebay canal and penstock should be accounted for in the 80/20 test, and the fair market value of these components was \$6 million upon the project's completion. In this case, the fair market value of original property would be ~31% of the post-construction facility (that is, \$8 million/\$26 million) rather than 10 percent. The owner's renovated facility therefore would be ineligible for the ITC or PTC and, as a result, the owner's credits would be recaptured and the owner would be required to pay back to the Treasury the dollar amount of these credits (plus applicable interest and penalties).

It is essential that the IRS and Treasury Department provide guidance on this issue. The NHA believes that this lack of clarity will have a significant chilling effect on capital investment for the renovation, refurbishment, and/or improvement of existing hydropower facilities. Owners of hydroelectric facilities will be unable to apply the 80/20 tests to their prospective projects

with certainty and, without a high degree of confidence that the ITC or PTC will be available upon completion, these owners simply may abandon projects before they begin. Renewable energy investors, including tax equity investors, are more likely to invest in other generation technologies, including solar and wind, for which the application of the 80/20 test is better defined. And, finally, owners that forge ahead, invest in significant renovation projects, and claim the ITC or PTC will live under the constant specter of a future IRS challenge and the risk of credit recapture (plus applicable interest and penalties).

National Hydropower Association Summary of Positions under 80/20 Test

Executive Summary

- In this summary we describe five positions that the National Hydropower Association (NHA) could take in connection with the application of the 80/20 test (the 80/20 Test) to hydroelectric dam and pumped storage facilities in conversations with and/or written proposals to the Treasury Department (the NHA Proposal). All "Section" references in this summary are intended to refer to the Internal Revenue Code of 1986, as amended.
- Position 1 (narrow ringfence limited to electromechanical equipment) and Position 2 (broad ringfence to include reservoir(s) and other land improvements) would permit the Treasury Department to apply the existing framework and principles of the 80/20 Test, as they relate to solar, wind, biomass, etc., to hydroelectric dam and pumped storage facilities. For this reason, we believe the Treasury Department would be receptive to Position 1 and Position 2. By contrast, Position 3, Position 4, and Position 5 would require the Treasury Department to provide guidance that is inconsistent with the existing framework and principles of the 80/20 Test.
- A final observation: we think it is unlikely that the Treasury Department will permit the ITC credit base for a hydroelectric dam or pumped storage facility to be broader than the ringfence for purposes of the 80/20 Test. The Treasury Department will likely prefer, and this summary assumes, that the scope of the ITC credit base and the ringfence for the 80/20 will be congruent.

Scope of Federal Income Tax Credits Relevant to the NHA Proposal

Credits of Primary Importance to NHA Proposal

- Electricity generation
 - o <u>Clean electricity investment credit for qualified facilities</u> (Section 48E). 30 percent credit for facilities placed in service during or after 2025 until at least 2032.
 - o <u>Clean electricity production credit for qualified facilities</u> (Section 45Y). 2.75 cents per kilowatt hour for first ten years of facility placed in service during or after 2025 until at least 2032.

- Energy storage¹
 - o Energy credit for energy storage technologies (Section 48). 30 percent credit for facilities that begin construction before 2025.
 - o <u>Clean electricity investment credit for energy storage technologies</u> (Section 48E). 30 percent credit for facilities placed in service during or after 2025 until at least 2032.
- This summary refers to (1) the energy credit under Section 48 and the clean electricity investment credit under Section 48E as "Investment Tax Credits" or "ITCs" and (2) the clean electricity production credit under Section 45Y as a "production tax credit" or a "PTC."

Credits of Secondary Importance to NHA Proposal

- <u>Production tax credit for qualified hydropower facilities</u> (Section 45). 2.75 cents per kilowatt hour for first ten years of incremental hydropower production attributable to improvements that begin construction before 2025.
- Energy credit for qualified property (Section 48). 30 percent credit for hydropower improvement projects that begin construction before 2025.

We believe these credits are of secondary importance to the NHA Proposal because each credit is awarded for, and therefore incentivizes, improvements to a hydroelectric dam to increase production. By contrast, the 80/20 Test is best suited for an ITC or PTC that is available for an entire hydroelectric dam or pumped storage facility that is deemed to be originally placed in service.

Summary of Applicable Law

A facility may qualify as originally placed in service even though it contains used property, provided that the fair market value of the used property is not more than 20 percent of the facility's total fair market value (that is, the sum of (1) the cost of the new property and (2) the fair market value of the used property). See Notice 2018-59 (application to energy property for purposes of Section 48; Notice 2016-31 (application to a facility for purposes of Section 45); Notice 2008-60 (application to biomass facility for purposes of Section 45); Rev. Rul. 94-31 (application to onshore wind facility under Section 45); Rev. Rul. 68-111 (application to Section 38 property under previous Section 48).

¹ This summary assumes that pumped storage facilities would qualify for the ITC for energy storage technology and not the ITC or PTC for electricity generation.

Summary of Positions under the 80/20 Test

Position 1: Narrow ringfence limited to electron	nechanical equipment.	
Bo/20 Test applied solely to the generation unit: • Hydroelectric dam facility: Turbines, generator, and related equipment. • Pumped storage facility: Turbines, generator, pump apparatus, and related equipment.	 Advantages Position 1 would make the 80/20 Test easiest to satisfy of the five positions described in this summary (narrowest ringfence). Position 1 would not require a change to the basic framework of the 80/20 Test. Position 1 would permit the application of the 80/20 Test separately to a single generation unit even if multiple units are included within a single facility. 	 Disadvantages Position 1 would likely exclude certain property that is "integral" to hydroelectric dam and pumped storage facility (see Rev. Rul. 94-31). Position 1 would necessarily be inconsistent with scope of ITC-eligible property for hydroelectric dam and pumped storage facilities described in GE Vernova Comment Letter. The ringfence for purposes of the 80/20 Test under Position 1 would be narrower than the ITC credit base for a hydroelectric dam or pumped storage facility. Risk that Treasury Department would narrow the ITC credit base to be consistent with ringfence for purposes of 80/20 Test.
Position 2: Broad ringfence to include reservoir	(s) and land improvements.	
Description	Advantages	Disadvantages
80/20 Test applied to a broader scope of property:	• Position 2 would not require a change to the basic framework of the 80/20 Test.	• Under Position 2, the 80/20 Test would be unlikely to be satisfied for any renovation

Hydroelectric dam facility: Tangible property from reservoir through generation unit(s) (turbine, generator, and related equipment) to step-up transformer, including land improvements.

- Position 2 would not create risk the Treasury Department would narrow the ITC credit base (compare Position 1).
- Position 2 would be consistent with scope of ITC-eligible property for hydroelectric dam and pumped storage facilities

project other than a full renovation or rebuild following a casualty event.

Under Position 2, there would be limited (or no) opportunity to apply the 80/20 Test separately with respect to a single generation unit within a broader facility.

Pumped storage facility: Tangible property from upper reservoir to lower reservoir, including generation unit (turbine, generator, and related equipment), pumps, pipe, and step-up transformer, plus additional land improvements.	 described in GE Vernova Comment Letter. Position 2 would be convenient for hydroelectric dams and pumped storage facilities needing extensive renovation. Position 2 appears to be the most likely to be accepted by Treasury Department (most onerous application of 80/20 Test). 	
Position 3: Flexible ringfencing based on choice		D'a la description de la constant de
Description 80/20 Test applied differently for retrofitted	Advantages	Disadvantages • Position 3 would represent a departure from
facilities seeking to claim the ITC and PTC:	• Position 3 would permit optionality based on the taxpayer's credit preference.	• Position 3 would represent a departure from existing 80/20 Test principles.
• <u>ITC-eligible renovations</u> : Same scope	Taxpayer would be able to choose the PTC	• Under Position 3, the inconsistent application
as described above under Position 2.	for renovation projects that require	of the 80/20 Test to ITC- and PTC- eligible
<u>PTC-eligible renovations</u> : Same scope as described above under Position 1.	improvement only to electromechanical equipment and ITC for broader	facilities is difficult to justify. Treasury Department is unlikely to agree to
as described above under resident r.	renovations.	taxpayer optionality.
	Position 3 would permit taxpayers to	
	choose the ITC in broader renovation projects and therefore maximize the credit	
	incentive.	
		<u> </u>

Description	Advantages	Disadvantages
80/20 Test applied differently for retrofitted facilities depending on the nature of the renovation work. Components and/or equipment that are integral to a hydroelectric dam or pumped storage facility (that is, within the scope of property described in Position 2) would be included in scope of the 80/20 Test if, and only if, the taxpayer performs "substantial improvement" on the components/equipment.	 Position 4 would permit optionality based on the nature and scope of the required renovation. Equality of application; all renovated facilities, whether narrow or expansive, would have the same general likelihood of satisfying the 80/20 Test. Position 4 seems more likely to be accepted by the Treasury Department than Position 3 given that the ringfence would be based on the scope and nature of the renovation and not the taxpayer's choice. For an ITC-eligible facility, the scope of the 80/20 Test under Position 4 should be consistent with scope of ITC credit base. 	 Position 4 would represent a departure from existing 80/20 Test principles. Position 4 would present administrative challenges as to definition of "substantial improvement" or other definitional standard Treasury Department is unlikely to agree to taxpayer optionality.
Position 5: Narrow ringfencing with election. Description 80/20 Test applied to retrofitted facilities as described under Position 1.	Advantages • Position 5 would permit taxpayers to expand the ringfence for purposes of the	Disadvantages • Position 5 would represent a departure from existing 80/20 Test principles.
However, taxpayer would be permitted to make an irrevocable election, as of the start of construction of the applicable facility, to include, within the 80/20 Test ringfence, other improvements that are required to operate the hydroelectric dam or pumped storage facility	 80/20 Test in connection with facilities with broader renovations. The ringfence for purposes of 80/20 Test under Position 5 would expand depending on a taxpayer's scope of work. For an ITC-eligible facility, the scope of the 80/20 Test under Position 5 should be 	 Position 5 would present administrative burden (including substantiation that certain improvements are required for operation of facility). Treasury Department is unlikely to agree to taxpayer optionality.

improvements required for licensure).	