

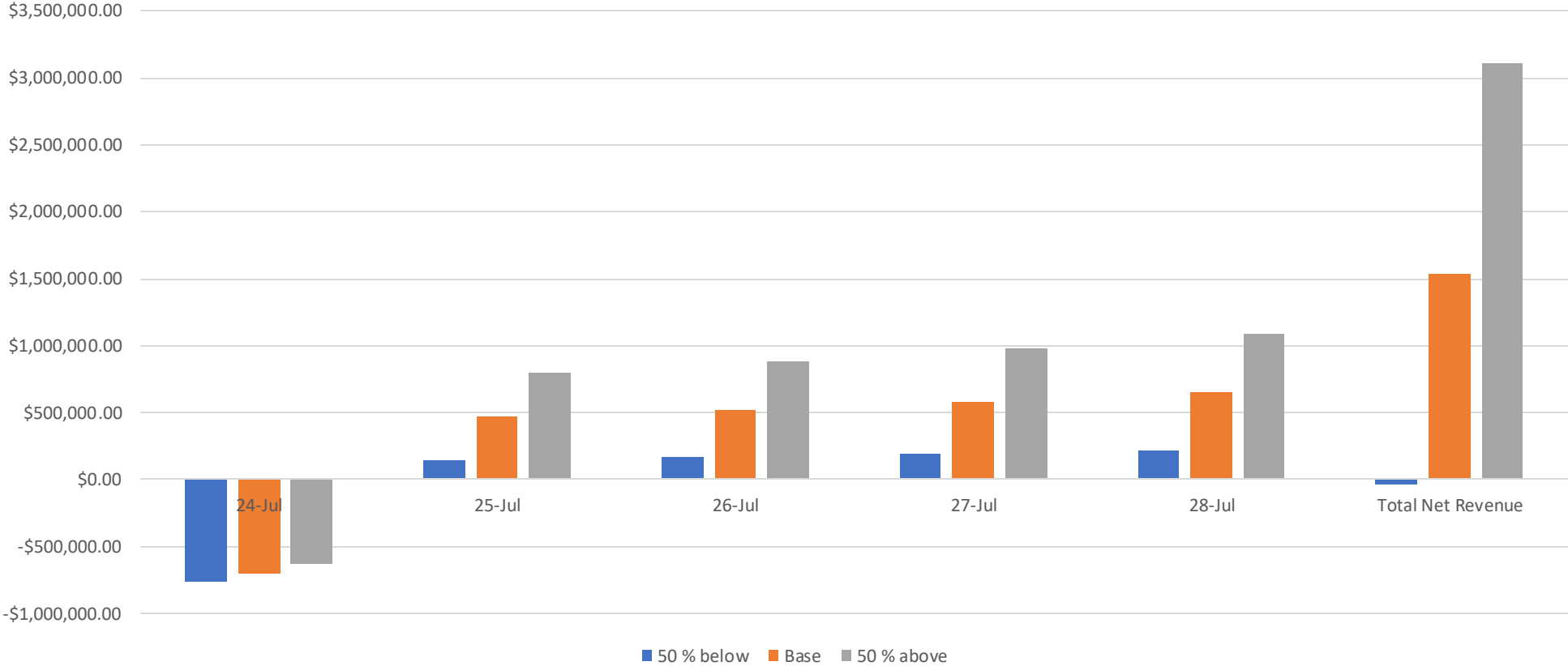
Hydropower Systems Principles Course

Revenue Estimates + Curriculum Development

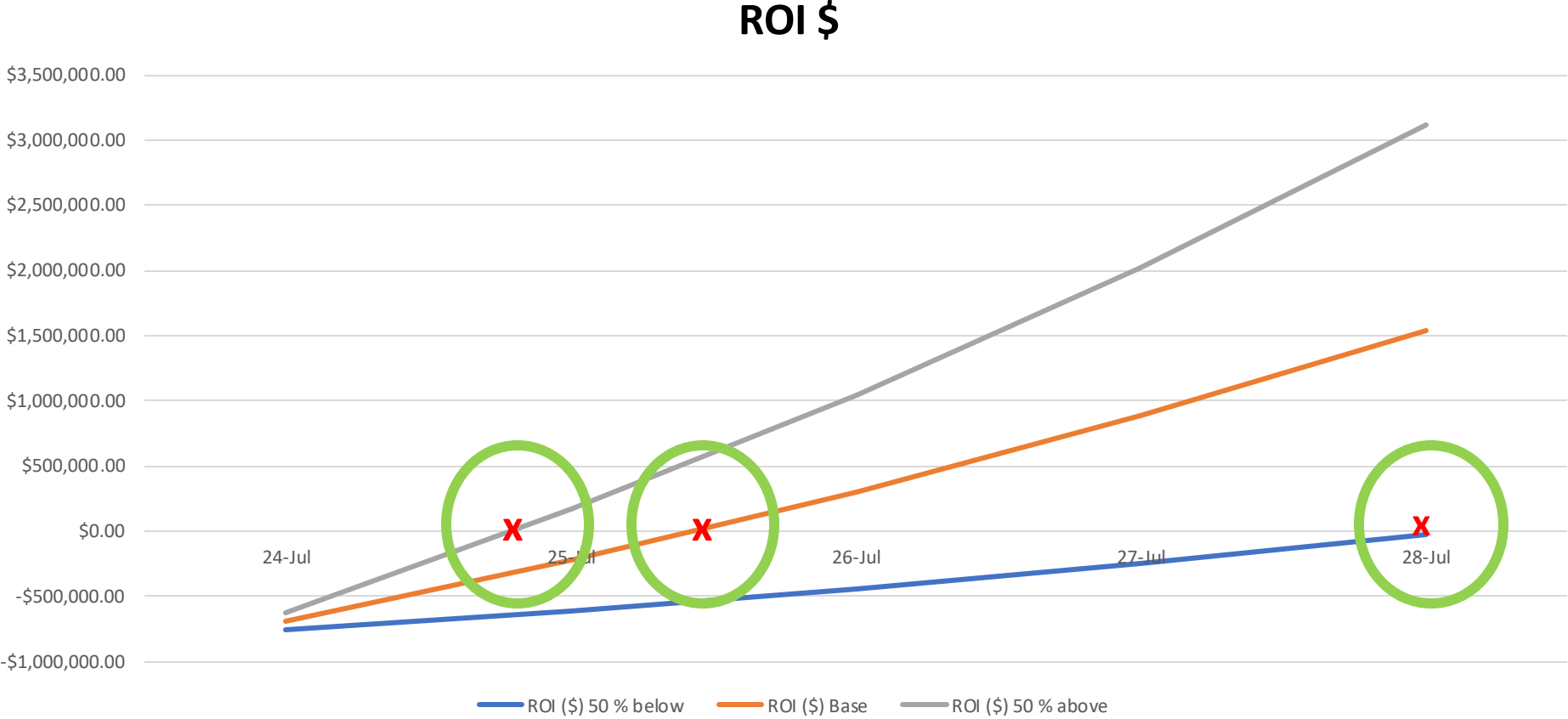
March 12, 2024

Hydropower System Principles Financial Projections

Net Revenue



Hydropower System Principles Financial Projections



Actions taken since December 2023 Board Meeting

- **Curriculum Creation**
- Request for Expressions of Interest closed – December 19
- 30 responses received, identifying
 - Bidders
 - Trainers
 - In-Kind contributions
 - 201 level training opportunities
 - Future lunch and learns

Actions taken since December 2023 Board Meeting

- Finalized bidders list – December 22
- Issued Request for Proposals – January 16
- Held information call with bidders – January 29
- Mobilized Proposal Review Team (manage conflicts) – Feb 1
- Proposals due – February 16
- Proposal Selection (Process) – underway

Proposal Review Team

- Brianne Wilson – USACE
- Chris Mattson – Tacoma Power
- Don Nims - Colliers Engineering & Design
- Eric Van Deuren – PG&E
- Heidi Wahto – Stantec
- Katia Debian – GE Vernova
- Mark Benacquisto – UBC
- Megan Nesbitt – Andritz
- Sarah Kulpa – HDR
- Suzanne Biddle - TVA
- Thomas St.John – Southern Company

4 Proposals Received

- AnchorQEA/Merjent; Modules 1,2,3,4 and 7
- Gomez and Sullivan; Modules 1,3,7 and 8
- BBA/Metsco; Module 5
- KGS; All modules (1 to 8), Project Management.

"Hydropower System Principles":

1. Introduction / Overview / Foundation / Water to Wires
2. Production Planning and Water Management
3. Dam Safety
4. Equipment, Engineering and Technology
5. Asset Management, including Reliability
6. Markets
7. Environment
8. Licensing/Permitting

Projected Budget

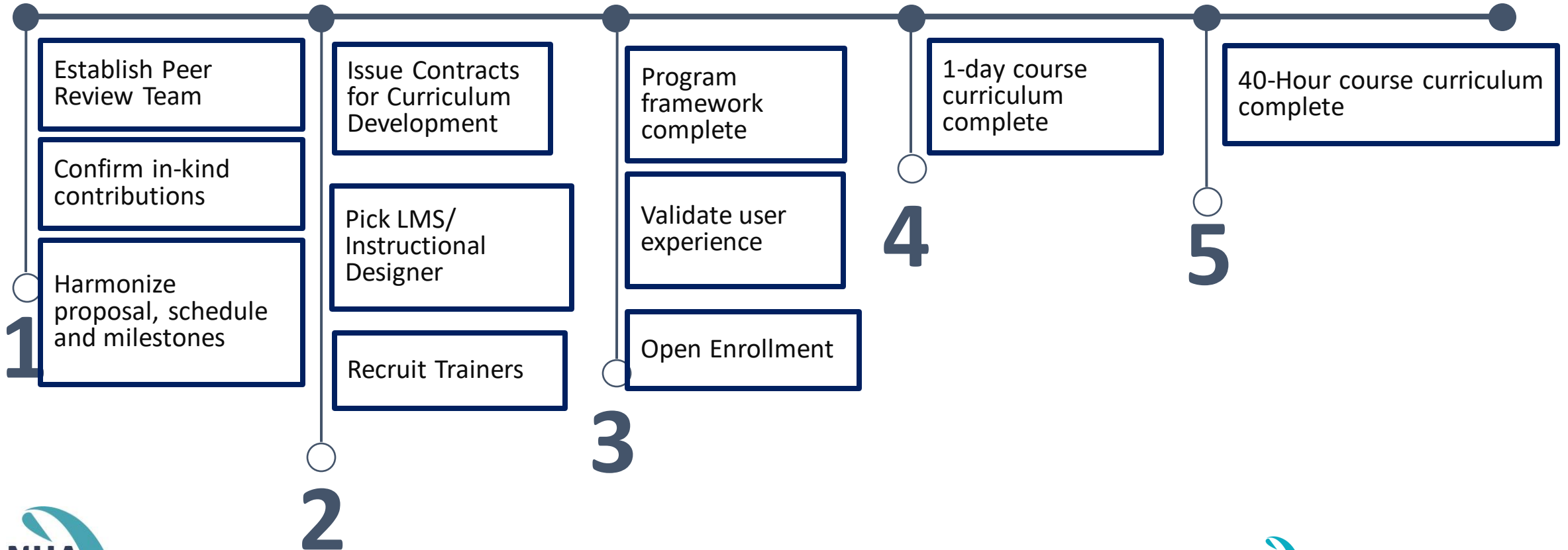
Item	2024 (Y - 0)	2025 (Y - 1)	2026 (Y - 2)	2027 (Y - 3)	2028 (Y - 4)
Content Creation	\$750,000.00	\$0.00	\$0.00	\$0.00	\$0.00
Learning Management System (LMS)	\$25,000.00	\$25,000.00	\$26,250.00	\$27,562.50	\$28,940.63
Instructional design	\$25,000.00	\$5,000.00	\$5,250.00	\$5,512.50	\$5,788.13
Faculty	\$25,000.00	\$100,000.00	\$105,000.00	\$110,250.00	\$115,762.50
Administration (1/2 FTE)	\$0.00	\$50,000.00	\$52,500.00	\$55,125.00	\$57,881.25
Total Cost	\$825,000.00	\$180,000.00	\$189,000.00	\$198,450.00	\$208,372.50

PROJECT MILESTONES – POST MARCH 2024 BOARD MEETING

March/April 2024

September 2024

December 2024



1-Day Course in '24 – Why It's Possible in Q4

- Two Opportunities to Deliver the Program, with one in-person, are possible in Q4
- Industry Interest Indicates Enrollment Likely...

Industry Interest

Request for Feedback “Hydropower System Principals” Course for Hydr

Please take a moment to read the below information and answer the short survey (estimated time to complete: 3 minutes)

The need for continuing education and professional development for these employees is greater than ever before.

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.

Given the proposed course content and the eight modules outlined above, this represents approximately 40 hours of training. Each employee completing the training will receive an "NHA certification" designation.

The course content will be delivered virtually. However, NHA will also explore opportunities to leverage existing in-person national and regional events owned and organized by NHA in order to supplement learning opportunities. In addition to the 40 hours of training, NHA envisions also offering a 1-day overview course.

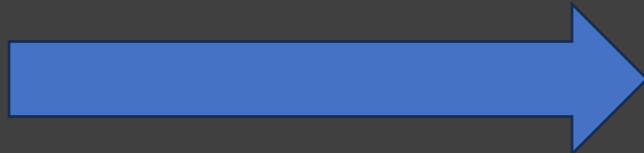
Generally, course enrollment cost is expected to range from \$50 to \$100 per hour of curriculum.

From '23 Survey
Nov-Dec

116 Total Responses from
NHA Member Organizations



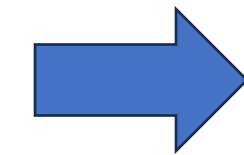
How Many People Do We Think Might Enroll in 1-Day Course, if Offered in '24?



Q5: Please estimate: In year 1, about how many employees might you enroll for our 1-Day Course?

**One Day Course Attendance
(based on survey data)**

Enrollment Amt	Number of Orgs "checked this box"
1 to 5	69
6 to 10	11
11 to 15	4
16 to 20	4
20+	2



Multiplied by circled (conservative) #

Total Enrollees (estimate)
69
66
44
64
40

Potential enrollees based on survey responses **283**



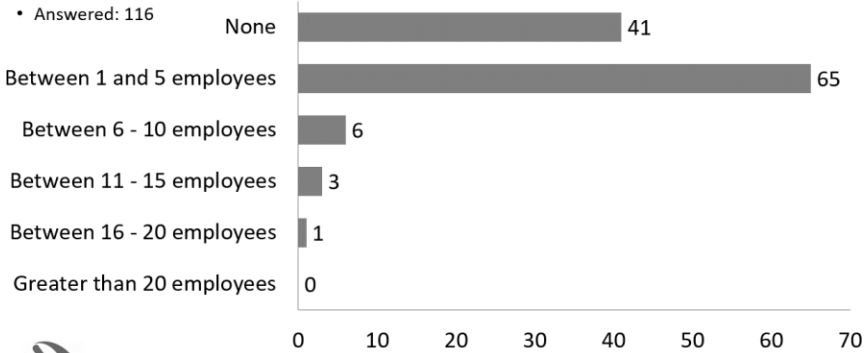
Baseline 250 In '24

~125 in person

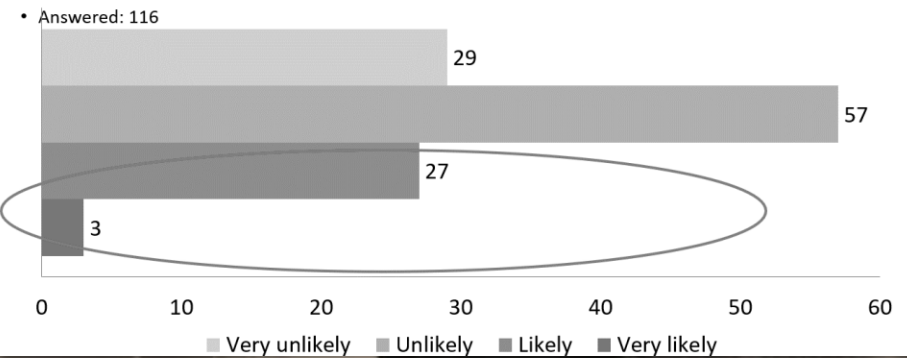
~125 virtually

Similar Method Used to Project 40-Hr Enrollees and Licenses in 2025

Q4: Please estimate: In year 1, about how many employees might you enroll for our 40-Hour Virtual Course during one year?



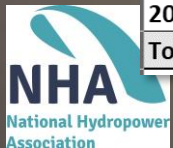
Q6: What is the likelihood that you would consider purchasing a license from NHA to create custom content for your company related to our Hydropower System Principals Course?



Very unlikely Unlikely Likely Very likely

40-Hour Course Attendance (based on survey data)

Enrollment Amt	Number of Orgs "yes"	Multiplier (enrollees)	Est. Total of Enrollees
1 to 5	65	1	65
6 to 10	6	6	36
11 to 15	3	11	33
16 to 20	1	16	16
20+	0	20	0
Total Est Enrollees in 40 hr Course in Year 1			150



125 40-Hour Enrollees
4 Licenses

Hydropower System Principles Financial Projections (Base)

	2024 (Y 0)	2025 (Y 1)	2026 (Y 2)	2027 (Y 3)	2028 (Y 4)
Estimated Revenue	\$127,000	\$655,000	\$712,500	\$783,750	\$862,125
Estimated Expenses	\$825,000	\$180,000	\$189,000	\$198,450	\$208,373
Net Revenue	(\$698,000)	\$475,000	\$523,500	\$585,300	\$653,752

What might we charge for enrollment fees?

- Member and Non-Member Rates

- One day -- \$625 | \$495 (Member Discount)

- 40-Hour -- \$4k | \$3k (Member Discount)

- Licenses -- \$30k/year + ~\$2k development fee (one time)



Not a *final* pricing model!

Value

By the Industry,
for the Industry

Vision --> Experience

Other considerations...

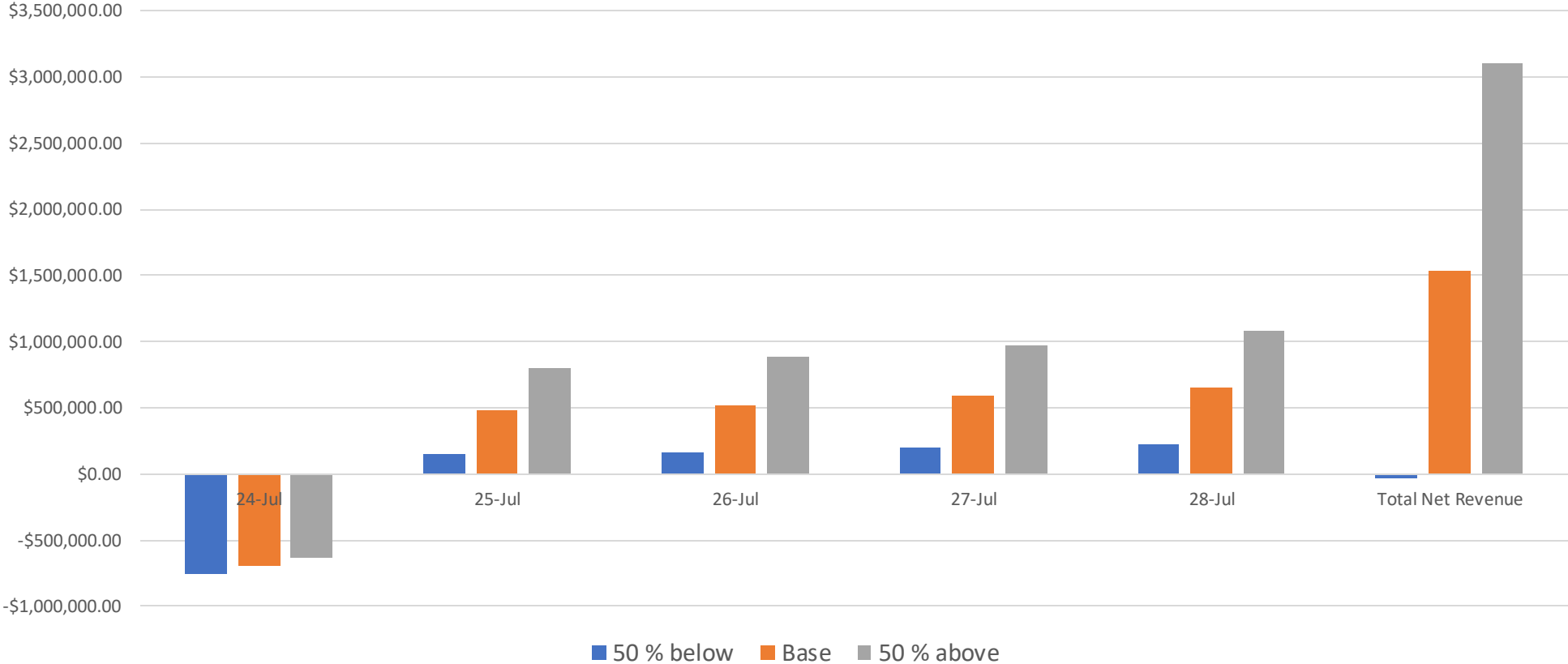


...2025 Projections

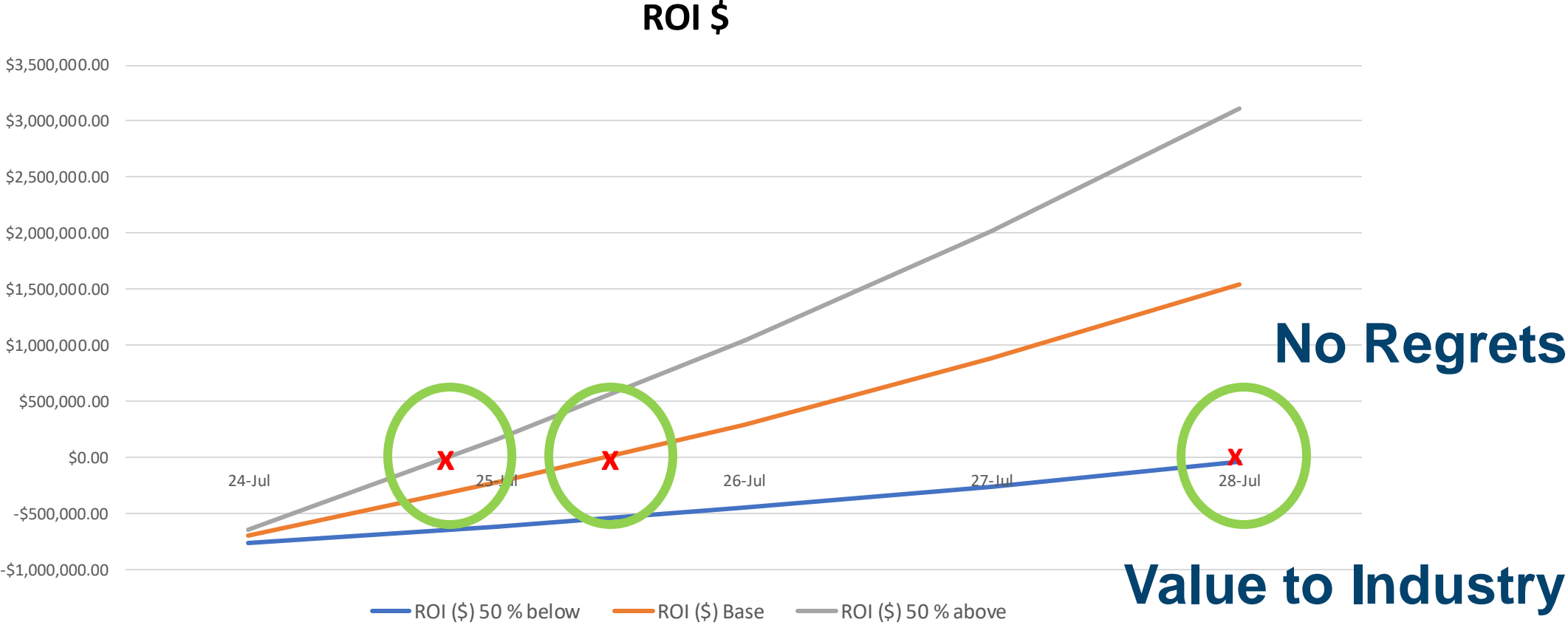
2025	Enrollees	Tuition (NHA Members)	Tuition (Standard)	Est. Revenue	Est. Expenses	Net Revenue, 2025
1-Day	250	\$495	\$625	\$127,000		
40-Hour	125	\$3000	\$4000	\$400,000		
Licenses	4	\$30,000 (lic. fee)	\$2,000 (dev fee)	\$128,000		
Totals				\$655,000	(\$180,000)	<u>\$475,000</u>

Hydropower System Principles Financial Projections

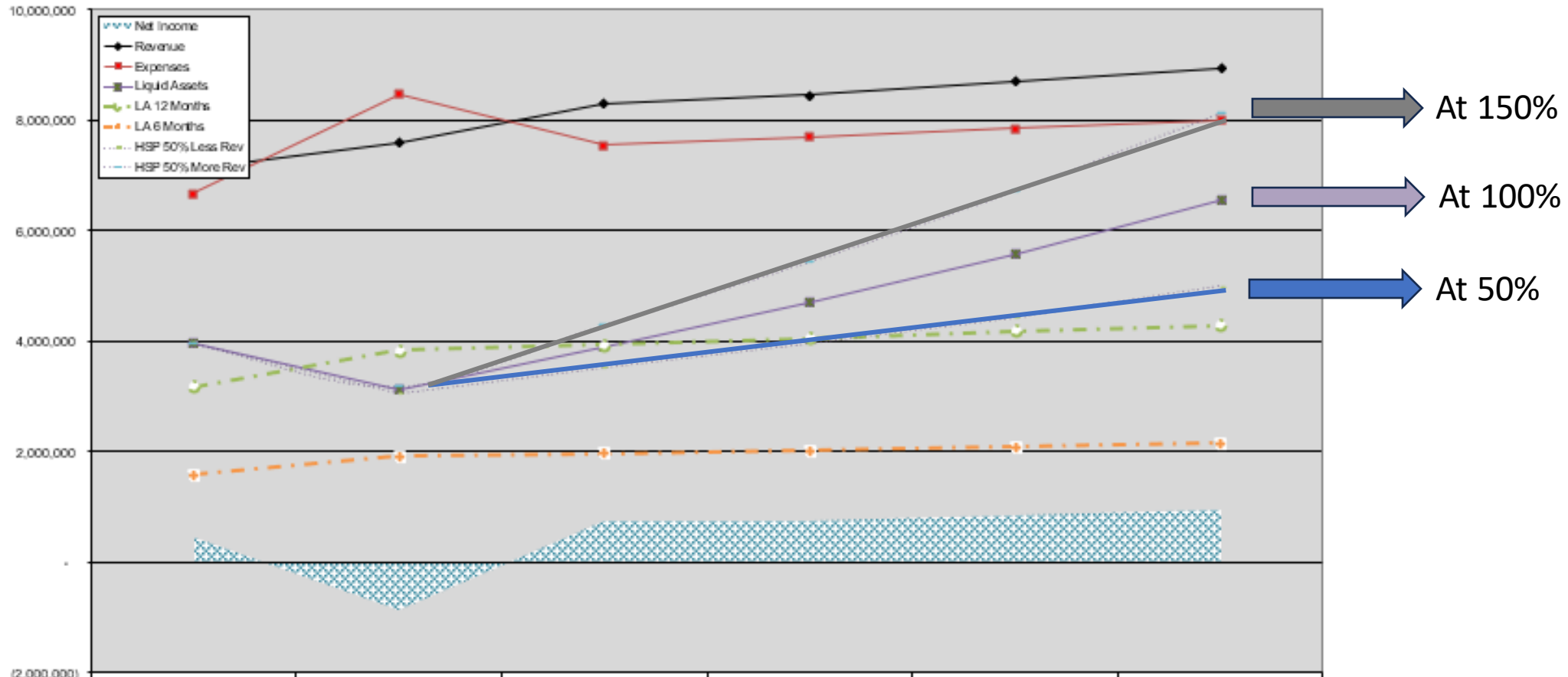
Net Revenue



Hydropower System Principles Financial Projections



Pro forma for FY24 Budget Hydropower System Principles (baseline)



	2023	2024	2025	2026	2027	2028
Net Income	449,192	(860,497)	751,294	756,801	849,020	949,102
Revenue	7,127,151	7,605,355	8,303,286	8,454,710	8,698,559	8,951,728
Expenses	6,677,959	8,465,852	7,551,991	7,697,909	7,849,539	8,002,626
Liquid Assets	3,962,904	3,131,207	3,912,165	4,699,520	5,580,011	6,561,528
LA 12 Months	3,181,356	3,830,724	3,948,510	4,062,123	4,179,194	4,296,549
LA 6 Months	1,590,678	1,915,362	1,974,255	2,031,061	2,089,597	2,148,274
HSP 50% Less Rev	3,962,904	3,067,707	3,521,165	3,952,270	4,440,886	4,991,341
HSP 50% More Rev	3,962,904	3,194,707	4,303,165	5,446,770	6,719,136	8,131,716