# MEETING 4: CONCEPTUAL PORT ALTERNATIVES AND ANALYSIS

Monday, December 12, 2022 – 9am-12pm Virtual Meeting Advisory Group Members and the public all participated remotely.

**Objective**: To review and discuss the tours of Eastport and Searsport; discuss options for launching the hulls; provide updates on the changes to the preliminary range of offshore wind (OSW) Port alternatives; and provide an update on the impact results for select criteria on the alternatives evaluation matrix.

### **MEETING TAKEAWAYS**

### **Evaluation Criteria, Alternatives, and Features**

- The Port Advisory Group (PAG) suggested no additional evaluation criteria, alternative locations/sites for the wind port, or information about existing environmental resources or features to aid in the evaluation of overall feasibility and environmental impacts in advance of the meeting.
- 2. Steve Miller submitted "An Evaluation of the Significance of Impacts Sears Island Dry Cargo Terminal Searsport, Maine September 29, 1995" via email during the meeting.
- 3. The PAG is encouraged to send prior studies, reports, or other information that may be helpful evaluating alternatives to Kay Rand.

### **Present Options for Launching OSW Hulls**

- 4. Matt Burns noted two methods are being considered for the launching of the OSW hulls or foundations into the water: launch by semi-submersible barge and launch by ramp with a mechanical system for controlled descent.
- 5. The State of Maine is continuing to explore the launch methods and refine the port alternatives. Industry developers have provided input on launching methods.

### **Changes to Conceptual Alternatives Following Discussions at PAG Meeting 3**

- 6. Port alternatives include areas for both barge and ramp options. Dredge quantities have been updated very recently. Matt Burns will incorporate the revised dredge quantities into his presentation before posting to the website.
- 7. The PAG raised questions about 1) the use of the federal navigation channel for launching the wind turbine generators (WTGs), 2) the potential for phasing wind port development to begin at Mack Point during support for test units and expand to Sears Island as the industry scales up, including an upgrade of the bulk dock at Mack Point, and 3) the status of engineering and environmental investigations at Mack Point. All three points are under consideration.

### Preliminary Impact Results for Select Alternatives Evaluation Criteria



8. The conceptual alternatives continue to be developed and are not ready for evaluation, even at a high-level. The preliminary impact results are expected at the next meeting.

### **Industry Updates and Related Actions**

- 9. **California Lease Sale.** California sold five leases for floating OSW sites off the coast of Morro Bay in Humboldt County for a total of \$757M. The sale was smaller than the sale of the NY Bight leases for fixed bottom OSW for \$4.37B under different physical and market factors (e.g., power sales agreements). Two of the developers or lease holders have an East Coast presence; one has spoken with Sprague. Specific OSW technologies are not known but are expected to be varied.
- 10. USDOT-MARAD Port Infrastructure Development Program (PIDP) Awards. Several grant awards from this federal discretionary grant program were announced in November 2022:
  - a. Connecticut: \$10.5M for an operations and maintenance (O&M) facility for farms in service in Bridgeport
  - b. Massachusetts: \$34M for a 35-acre marshaling facility for fixed bottom wind in Salem
  - c. New York: \$48M for a marshaling facility in Staten Island
  - d. Michigan: \$11M for the Lake Erie Resilience Project in Monroe

PIDP is likely to be one of several funding sources that the State of Maine would pursue for OSW port development.

Regarding funding, federal legislation addresses cost sharing elements and revenue sharing from lease sales in the Gulf of Maine. BOEM has received interest from five developers in the Gulf of Maine. Proximity of the leases to Eastport appear to increase the viability of Eastport. More information can be found here: <u>https://www.boem.gov/renewable-energy/state-activities/maine/gulf-maine</u>.

- 11. Searsport Rail Project. Highland Pellets, LLC has leased the former Great Northern Paper mill site to a build wood pellet mill for export to Europe. The mill would feed pellets into rail cars for transport to Searsport. NBM Railways would connect to Canadian Pacific for service to Searsport; rail improvements, including reconnections, replacements, and new track, would be needed. Federal grant funding, matched with state and private investment, has been sought. Grant awards are expected in the Spring 2023. Sprague has a plan to accommodate prospective wood pellet and biofuel transport activities without impact to land capacity for an OSW port.
- 12. **Channel Dredging.** MaineDOT has a permit for beneficial reuse of dredged material and upland disposal at Mack Point but was recently told that the U.S. Army Corps of Engineers (USACE) cannot fund the State's preferred alternative. The feasibility of a cost share option is not known. The State is waiting for the USACE's decision document, which may identity another disposal alternative.
- 13. Other News from PAG Members. Rolf Olsen noted Dr. Dagher may have a potential conflict of interest between his position at the University of Maine and the PAG. The University holds numerous patents in OSW technology and stands to gain from the floating OSW industry in the Gulf of Maine. Dr. Dagher and others may share in that gain. Prior to the meeting, he asked if this could be addressed. Dr. Dagher did not attend the meeting and is expected to speak about University of Maine's patents on OSW technology at the next meeting.

Rolf asked for a future discussion of other technologies that could potentially satisfy the purpose and need of this study such as the use of vertical wind turbines and tidal energy (i.e., renewable energy generated by waves and the natural rise and fall of ocean tides and currents).

#### Wrap-up and Next Steps

14. The State of Maine anticipates the next PAG meeting will be scheduled in first quarter of 2023. The agenda is anticipated to consist of discussion of the alternatives as they continue to evolve, their preliminary environmental impacts, both beneficial and adverse, and potentially, planning level costs estimates to construct the alternatives.

#### Suggested Reading List

- 2022 PIDP Grant Awards List (Please note projects specific to OSW)
- <u>California OSW Lease Press Release</u>
- <u>Millinocket Wood Pellet Project Article</u>
- <u>DemoSATH Youtube Channel</u> (check out DemoSATH part 1-5)

# ATTENDANCE

### **ADVISORY GROUP MEMBERS**

Beth Ahearn, Maine Conservation Voters, Co-Chair James Gillway, Town of Searsport, Co-Chair Matt Cannon, Sierra Club Maine Joshua Conover, Islesboro Marine Enterprises (absent) Habib Dagher, Ph.D., P.E., University of Maine College of Engineering (absent) Dennis Damon, Maine Port Authority Eliza Donoghue, Maine Audubon Francis Eanes, Maine Labor Climate Council David Gelinas, Capt., Penobscot Bay & River **Pilots Association** James Guerrette, Citizen, towns of Searsport Jessie Gunther, Retired Judge, Public At-Large Member Ben Lucas, Maine Chamber of Commerce Sean Mahoney, Conservation Law Foundation Matt Marks, Associated General Contractors of Maine Paul Mercer, Consultant to Governor's Office Steve Miller, Islesboro Islands Trust Rolf Olsen, Friends of Sears Island Mac Smith, Towns of Stockton Springs (absent) Jim Therriault, Sprague Energy

### MAINEDOT PERSONNEL & CONSULTANTS

Bruce Van Note, MaineDOT Matt Burns, Maine Port Authority Nate Benoit, MaineDOT Nate Moulton, MaineDOT Kristen Chamberlain, MaineDOT Chris Mayo, MaineDOT Spencer Roberts, MaineDOT Kay Rand, Consultant Bill Plumpton, Gannett Fleming, Inc. Adam Archual, Gannett Fleming, Inc. Michelle Brummer, Gannett Fleming, Inc. Julia Roblyer, Gannett Fleming, Inc.

### PUBLIC

**Greg Biddinger** Amy Browne Steve Bulloch Celeste Carey Philip Conkling **Edward Cotter Court Dwyer** Jerri Holmes David Italiaander Caleb Jackson Andrew Johnson Daniel Kennedy Steve Mars **Dan Nichols David Perkins Gwyneth Roberts** Jeff Romano, Maine Heritage Coast Trust **Beverly Roxby** Zach Schmesser Laurie Schweikert **Deborah Smith** Fran Turner Susan White Janet Williams **Eileen Wolper** 

# **MEETING NOTES**

## 1. WELCOME AND OPENING REMARKS

- Bill Plumpton of Gannett Fleming, Inc., introduced himself as the State of Maine's facilitator for this meeting and welcomed attendees. He characterized the meeting as a progress report on ongoing early port planning and development. He noted developing alternatives is an iterative process and it will take time to develop the alternatives to the point where the Port Advisory Group can consider them in detail, discuss them thoroughly, and give them a true hard look.
- Bill reviewed the PAG's role: to provide advice to the State of Maine. In addition to providing advice:
  - $\circ$   $\;$  The advisory group operates like a focus group with information shared and advice given.
  - Relay information to groups, organizations, and associations to help make sure correct information is being used and discussed; work to elevate and inform the conversations.
  - Help to strengthen public understanding of the study and planning process and the regulatory framework that will be used during project development and decision-making.
  - Share the State's progress with others.
- It was noted disagreement on some points and differences of opinion are expected. Everyone should expect to have an equal opportunity to express their thoughts and opinions and advice.
- It is understood that it takes time to digest information and to provide feedback, questions, and advice. Kay Rand is the single point of contact for follow up between meetings and she shares questions and input with the State's team.
- Beth Ahearn and James Gillway are the committee's co-chairs. Committee members can reach out to them.
- The State continues to keep a running list of questions. The planning for the OSW port has developed and the State is starting to answer some questions, but it is recognized that many can't be answered until later in the planning and design process. It is expected all questions will be answered at some point.
- The advisory group has complete freedom to express all thoughts and ideas. When giving advice, the PAG should try to say equally those things that are viewed as positive as well as negative and why you view the action or impact the way you do, and how a condition could be improved.
- Bill reviewed the agenda and changes to it since it was distributed.
- Habib Dagher is expected to speak about University of Maine's patents on OSW technology when he joins the meeting or at the next meeting.

# 2. ACTION ITEMS FROM MEETING 3: EVALUATION CRITERIA, ALTERNATIVES, AND FEATURES

Presented by Bill Plumpton, Gannett Fleming, Inc.

- At the September 29, 2022 meeting, the PAG was asked to consider three requests for advice:
  - Are there other variations of the existing conceptual alternatives, or other sites that should be considered?
  - $\circ$  Are there other evaluation criteria that should be added to the evaluation matrix?
  - Do you have other information about environmental resources or features at any of the alternative sites that would be helpful in the evaluation of impacts?
- The State of Maine has not received any input or information from members since the September 2022 meeting.



- No other variations of the existing conceptual alternatives or other sites for the port that should be considered were suggested.
- No other evaluation criteria to be added to the evaluation matrix was suggested.
  - Bill Plumpton referenced a past conversation and asked Matt Canon if he had suggestions for other criteria or a method for evaluating impacts.
    - Matt Canon I was curious about how the economic criteria would be measured, not additional criteria. I'll look for that or examples in the draft results.
- No other information about environmental resources or features at any of the alternative sites was offered.
  - Steve Miller submitted "An Evaluation of the Significance of Impacts Sears Island Dry Cargo Terminal Searsport, Maine September 29, 1995" via email during the meeting.

# 3. PRESENT OPTIONS FOR LAUNCHING OSW HULLS

Presented by Matt Burns, Executive Director, Maine Port Authority Presentation: Present Options for Launching OSW Hulls, OSWPAC Pres 4 12.12.22.pptx (7 slides).

- The State of Maine has assumed floating OSW turbines would use floating foundations like those the University of Maine has developed, thought there are different types of foundations across the industry. Of all the activities that would take place at the port, the most complex is launching the foundations into the water.
- The foundations would be built on land and transferred to a semi-submersible barge via heavy lift quay (and crane) for launching into deeper water. Alternatively, and based on factors such as the size of the foundation and site characteristics, a ramp could be used for the transfer.
- A foundation-launching barge is a semi-submersible vessel that is specialized for heavy weight, movable (not fixed like a ramp) by tugboats, and sensitive to wind/wave and other sea characteristics. It requires deeper water (65 feet).
  - Four photos from DemoSATH, a project by Saitec, a Spanish company, and RWE, launching a concrete foundation for a 2MW turbine (smaller than turbines envisioned in the Gulf of Maine) using Self Propelled Modular Transport vessels (SPMTs) were discussed.
  - Water depth is 35 feet along the quay. The launching area is deeper and would occur away from the quay.
- A launching ramp is fixed on the site and not movable. It could have mechanical components (e.g., a cradle, windlass, airbags, railway system) to control the descent of the foundation down the ramp into the water. These mechanical systems can be expensive to build and maintain. A ramp structure goes far below the water line (65 feet deep).
  - Four photos were discussed to show two methods—rail and airbags in series—to launch a ship.
- The port alternatives include areas for both barge and ramp options.
- Maine is continuing to explore the launch methodology and refine the port alternatives.
- Matt Marks Have industry developers provided input on a preferred launching method?
  - Matt Burns Yes, support from and feedback from developers has come via the Maine Research Array (MERA).



# 4. CHANGES TO CONCEPTUAL ALTERNATIVES FOLLOWING DISCUSSIONS AT PAG MEETING 3

Presented by Matt Burns

Presentation: Also in OSWPAC Pres 4 12.12.22.pptx (6 slides)

- Each alternative has been updated to incorporate a marine rail launching ramp. This does not mean the State has decided on this approach. This is still under consideration.
- The land area for the Mack Point, Sears Island, and Eastport alternatives are each estimated to be approximately 100 acres; the Mack Point/Sears Island hybrid alternative is estimated to be approximately 119 acres.

#### Changes to the Mack Point Conceptual Alternative

- The dredge area footprint was reduced; deep water is accounted for in the federal navigation channel.
- The dredge quantity was recently updated from 540,000 cubic yards (cy) (as shown) to 1M cy. This volume is preliminary as the layout continues to be further developed.
- The bulk dock could be used for raw materials but not for large, heavy components.
- A shared area is shown for potential OSW and other activities, not yet determined.
- Steve Miller Please expand on not needing a turning basin in front of the quay.
  - Matt Burns We think use of a barge would require less dredging. At this point, the ramp feature drives the dredging volume upward.
- Matt Canon Regarding the reorientation of the uplands area, is there a way to reposition the ramp and the quay into the federal navigation channel (to take better advantage of the deep water) and reduce the dredging area?
  - Matt Burns We will consider it.
- Jim Therriault Has there been an engineering assessment to upgrade the bulk dock to meet the load requirement? We can get to 500 metric tons today.
  - Matt Burns We think the bulk dock would require significant rehabilitation or demolition and reconstruction to achieve the loading requirement of 5000-6000 psf. Additionally, the nacelle is wider than the dock, and would require some improvement.
- Beverly Roxby, Belfast (Public) Will access to Mack Point—either by rail, road, or both—be needed?
  - Matt Burns The access hasn't been determined. If needed, reconfiguring existing access is an option. For example, the northern gate on Sprague Way could be upgraded. The State is not expecting a need for a significant change in access since many components would arrive by water.

#### Changes to the Sears Island Conceptual Alternative

- The marine rail ramp and dredge area were revised.
- The dredge quantity was recently updated from 80,000 cy (as shown) to 175,000 cy.
- The access road is not shown as improved, but improvements would be needed.

#### Changes to the Mack Point/Sears Island Hybrid Conceptual Alternative

# The State of Maine OFFSHORE WIND PORT ADVISORY GROUP



- Mack Point would be used for foundation manufacturing and launch, and Sears Island would host marshalling and integration (i.e., turbine assembly) activities.
- The bulk dock at Mack Point would receive dry materials.
- The dredge area (to 65 feet depth) is required only for the ramp.
- A shared use/activity area was included.
- The dredge quantity for the Mack Point portion was recently updated from 200,000 cy (as shown) to 480,000 cy.
- The Sears Island portion does not require dredging.
- Jim Therriault I think there would be significant time between test units (1, then 10) and full commercialization (100 units). Perhaps consider a phased hybrid approach, beginning at Mack Point and expanding to Sears Island.
- David Gelinas The dredge area (shown in dark grey) on all three Searsport alternatives stops at the federal navigation channel, which is 35 feet deep and sometimes less. Vessels sometimes must wait for the tide to increase water depth. Doesn't the deep water (dredge area) need to extend into the channel for the whole length of the launch?
  - Matt Burns We will consider it.
- David Gelinas Regarding Jim's suggestion about the bulk dock for initial assembly, what is the lay time required for assembly and what impact does that have on current deliveries to Mack Point?
  - Jim Therriault The bulk dock would be only for delivery; assembly would occur at Sears Island.
- Matt Canon First, could you explain the functions of each part of the hybrid alternative. Second, is it possible to expand the navigation channel and have the USACE pay for it rather than trying to work around it?
  - Matt Burns The foundations would be made and put in the water at Mack Point. The turbines would be assembled on the foundation at Sears Island. The USACE is protective of the channel because it is considered critical infrastructure. We have not brought this project to them to date. Any work close to the navigation channel will require their engagement.
- Beth Ahearn Will there be quantifiable environmental impacts and costs of each alternative?
  - Matt Burns We will quantify the impact and report that measure in each cell on the matrix. If we cannot quantify the impact, we will qualify the impact.

# **Changes to the Eastport Conceptual Alternative**

• This conceptual alternative has not yet been updated with a ramp, so there is no change to date.

# Discussion

- Matt Marks The timeline from port design to port operation will be important to the selection, acknowledging 18-24 months for permitting. How quickly can these be done. With the BOEM lease, there is a new intensity of interest from developers.
- Steve Miller There has been significant environmental and geotechnical investigations at Sears Island. We understand that M&N and subcontractors were engaged to conduct engineering studies to approximately 30% design at Mack Point. Has this been initiated or completed?



- Matt Burns MaineDOT has a proposal from M&N and its partners for Mack Point and is working to refine the scope. The geotechnical work is expected to be completed in Spring 2023.
- Steve Miller I assume they would work closely with Sprague who owns the property.
- Matt Burns Yes, that's something we have been doing from the beginning and it wouldn't change.
- Jim Therriault Will that engineering contract include the phased approach I mentioned?
- Matt Burns Right now, we're focused on full commercialization.
- Jim Therriault Would that include the bulk dock upgrade and cradle?
- Commissioner Van Note We can discuss that as an aspect of the scope, along with consideration of the private land ownership and cost and payment for that service. We need to treat and consider each site equally in this process. We will talk further about this with Sprague.
- Steve Miller Will there be environmental investigations beyond wetland delineation?
  - Matt Burns Right now, we're focused on technical work with M&N. We intend to engage with appropriate consultants during site selection on environmental aspects.

# 5. PRELIMINARY IMPACT RESULTS FOR SELECT ALTERNATIVES EVALUATION CRITERIA

Presented by Matt Burns and Bill Plumpton

• The conceptual alternatives are being refined and are not ready for evaluation and discussion, even at a cursory level. The State expects to present preliminary impact results at the next meeting.

# 6. INDUSTRY UPDATES

# Presented by Matt Burns

Presentation: Also in OSWPAC Pres 4 12.12.22.pptx (1 slide)

- Bill Plumpton The OSW industry in the U.S. was in its infancy and it was a rapidly evolving industry. We know that change is occurring rapidly, and the there is great need to both stay flexible, and up to date, with changes in the industry.
- Matt Burns shared several items of industry news:

### California OSW Lease Sale

- The lease sale for five floating OSW sites off the coast of Morro Bay in Humboldt County sold for \$757M.
- It was smaller than the NY Bight leases (30% bigger area), which were \$4.37B for fixed bottom OSW; market factors also contributed to the difference.
- California is realizing its port and power transmission infrastructure are not ready.
- Rolf Olsen What technology is envisioned—technology from the University of Maine?
  - Matt Burns Five developers won bids and they will likely use varied technologies.
- Jim Therriault Two of the five have an East Coast presence; one has spoken with Sprague.



- Rolf Olsen This process has focused on University of Maine floating technology. I have been looking at other technologies as my own due diligence. For example, vertical access designs require a different port design.
- Bill Plumpton suggested adding a technology update to next PAG agenda.

## USDOT-MARAD Port Infrastructure Development Program (PIDP) Awards for OSW Ports

- PIDP is a federal discretionary grant program.
- Several grant awards were announced last month. Several states applied for ports to support OSW:
  - Connecticut: \$10.5M for an operation and maintenance facility for farms in service in Bridgeport.
  - Massachusetts: \$34M for a 35-acre marshaling facility for fixed bottom wind in Salem.
  - New York: \$48M for a marshaling facility in Staten Island.
  - Michigan: \$11M for the Lake Erie Resilience Project in Monroe.
- PIDP is likely to be a funding source the State of Maine would pursue for port development.
- Commissioner Van Note This federal grant program is open to wind ports. It's too early to estimate, but a wind port in Maine could be a \$250M investment. Maine will need to look at more than one funding source for port development and prepare competitive applications for grant programs pursued.
- Jim Therriault Developers have made large contributions where they have power sales agreements in place.

### Searsport Projects, shared by Nate Moulton, Office of Freight and Passenger Services

- Highland Pellets, LLC has leased the former Great Northern Paper mill site to a build wood pellet mill. Pellets would be exported to Europe, which was formerly supplied by Russia and allies. The mill would feed pellets into rail cars for transport to Searsport; 30 rail cars per day, 90 ton each, and 1M tons annually. NBM Railways would connect to Canadian Pacific for service to Searsport.
- Various rail improvements would be made in Searsport as part of the Eastern Maine Railway Project, to be funded by the Consolidated Rail and Safety Improvement Program, a federal program. Improvements would include reconnections, replacements, and new track.
- MaineDOT has submitted a federal grant application for \$57M for these improvements. The proposed state investment is almost fully matched with private funds. If the grant is awarded, MaineDOT will administer the project. The State expects to hear the results of awards in Spring 2023.
- Rolf Olsen How will this increased activity impact Sprague's ability to manage all functions at the port? I also heard about a bio jet fuel facility at former Loring Air Force Base that would export fuel from Searsport.
  - Jim Therriault Sprague has a plan to accommodate these prospective activities without impact to lands and capacity for an OSW port. Sprague would need to expand staff to handle rail cars but does not expect to need more staff for more vessel activity. Overall utilization could increase from 20-23 percent to 40-45 percent. Biofuel is a longer-term prospect and would be conveyed from Loring to the Mack Point terminal by pipeline. This activity could use the existing tank and pump infrastructure to export via the liquid dock. There are other interests in moving pellets as well.



 Dennis Damon – As a Port Authority Board member, pellets can be moved by rail to a shipping point. There is a substantial conveyor system in Estes Head in Eastport without much activity; unfortunately, there is no rail connection. If there were rail, this underutilized port could be better used.

### Searsport Maintenance Dredging

- The federal navigation channel has not been dredged since the 1960s.
- MaineDOT, Sprague, and USACE have worked on a plan to minimize environmental impacts of dredging.
- MaineDOT has a permit for beneficial reuse of dredge and upland disposal on Mack Point but was recently told that the USACE cannot fund the State's preferred alternative. The State is waiting for the USACE's decision document.
- USACE had expressed interest in a confined aquatic disposal (CAD) cell for disposal of dredged materials. There is a potential different outcome coming from the USACE in writing. The decision is currently in USACE hands as they evaluate their preferred alternative.
- Steve Miller Is there a cost share option?
  - Matt Burns USACE has money programmed. We don't have the USACE's cost estimates.

#### **Other Committee News**

- Jessie Gunther I heard the Eastport Port Authority director has resigned. How does that impact Eastport?
  - Matt Burns The director is working part-time and has not fully resigned. I don't have a timeframe for his departure.
  - Rolf Olsen I read an article last summer that said Chris Gardner would complete his term by end of 2022.
- Jessie Gunther Has there been any update on the Passamaquoddy tribe's perspective?
  - Beath Ahearn I spoke with a Passamaquoddy tribal member who expressed concern about increased traffic through the reservation and referenced a discussion of the road being moved so it would not go through the reservation. Chris Gardiner spoke of this at the Eastport site visit.
- Eliza Donoghue I appreciate the characterization of the California and New York leases and their
  power purchase agreements and port readiness. Power purchase agreements and port readiness, as
  noted in the NY/NJ lease sale (NY Bight), are important to get funding from a variety of sources. We
  should assess readiness and what it means for us as a State. We need to be aware of the federal
  legislation that addresses cost sharing elements and revenue sharing from lease sales in the Gulf of
  Maine. BOEM has received interest from five developers in the Gulf of Maine. The proximity of the
  leases to Eastport appear to increase the viability of Eastport. More information can be found here:
  <a href="https://www.boem.gov/renewable-energy/state-activities/maine/gulf-maine">https://www.boem.gov/renewable-energy/state-activities/maine/gulf-maine</a>
- Rolf Olsen I raised a question about Dr. Dagher holding 80 or more patents in OSW technology. This sounds like he might stand to gain personally from floating OSW and may have a personal conflict of interest for his participation. I was told by Kay Rand that the University of Maine hold the patents; Dr. Dagher and others would gain a share. We all represent stakeholder groups, but I think Dr. Dagher represents a different type of stakeholder group. I wanted to air this topic with the PAG.

Therefore, I have looked at other technologies. I don't know if other technologies have been considered and eliminated from consideration.

- David Gelinas Will the revised conceptual alternatives be available?
  - Matt Burns The drawings will be updated within a few days and posted on the website.
  - David Gelinas Are we looking at the same turbine design?
    - Matt Burns I will defer to Dr. Dagher for specifics. I am not aware of changes that would affect the port requirements.

# 7. WRAP UP AND NEXT STEPS

**Bill Plumpton** 

- The State of Maine anticipates the next PAG meeting will be scheduled in first quarter of 2023. The agenda is anticipated to consist of discussion of the alternatives as they continue to evolve, their preliminary environmental impacts, both beneficial and adverse, and potentially, planning level costs estimates to construct the alternatives.
- Commissioner Van Note We will also share information on the active engineering contracts.

# 8. PUBLIC COMMENT

- Celeste Carey What will the environmental team consider? Will their work consider eelgrass and environmental restoration? Will they take into account Maine Climate Council goals and action plan?
  - Bill Plumpton These and many other subjects will be evaluated throughout the planning and permitting processes.
- David Italiaander There are other OSW floating technologies. What happens if Volturn proves to be obsolete and cannot be commercialized?
  - Matt Burns Our goal is to develop a wind port that can accommodate multiple developers and technologies.
- Amy Browne Is there an estimate of traffic into and out of a wind port? Also, have you considered recording these meetings?
  - Bill Plumpton Overland traffic will be quantified. To date, the meetings of the PAG haven't been recorded and meeting presentations and summaries are posted on the OSW website.
- Jim Bernard In December 2020, Governor Mills signed a technology sharing agreement with the UK. Has anything come of that agreement?
  - Matt Burns I am not familiar with this initiative. I will ask for an update from the Governor's Energy Office (GEO) for the next meeting.

# CLOSING AND ADJOURNMENT

The meeting adjourned at 11:23am.