



COMMITTEE REPORT

NB Power Community Liaison Committee (CLC)

April 12, 2023

Re: NB Power Community Liaison Committee (CLC) Lower St. John River Hydro/Mactaquac – Meeting Summary

The NB Power CLC met on March 23, 2023, 1-2 pm, at the Mactaquac station. Municipal representatives attended from the City of Fredericton, Central York Rural Community, and Hanwell Rural Community.

The meeting's presentations were delivered using PowerPoint slides (see digital file attached to this memo). During follow-up discussion, the following points of interest were made:

- It is too early to predict whether the spring freshet will result in flooding of the River this year.
- Current weather conditions are allowing for a slow snowmelt in the watershed.
- Power generation at the Mactaquac station was above normal over the winter months.
- There will be continued impacts to the traveling public as construction work proceeds with the Lifetime Achievement Project and with NBDTI upgrades to Route 105/Mactaquac Road where it crosses the structure. It is unlikely that the road will be closed completely but significant delays will occur between now and the end of the 2023 construction season.
- Home and cottage owners along the shores of the headpond are encouraged to consult this link for announcements about water level fluctuations in the Mactaquac Lake through the summer <https://www.nbpower.com/en/safety/dam-safety>

The message presented there will look like this:

2023-03-29 12:30:45.25

The Mactaquac headpond's normal level is 132 feet. During dry conditions and when maintenance work and other operations occur, levels can fluctuate. At 130 feet we warn boaters and dock owners to take precautions to protect their properties from damage. But different levels can affect dock and boat owners differently depending on the river topography. The number above represents real time levels at the headpond. If you would like to receive email advisory notices when the water level may be lowered below 130 feet, please email Corporate Communications.

The next meeting is scheduled for June 22, 2023.

Respectfully submitted by,

Debby Peck
Councillor, Ward 5

Community Relations Liaison Committee Lower St. John River Hydro/ Mactaquac

March 23, 2023



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Safety Message



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Safety Message:

Driving Safety



It may be getting close to the end of winter driving season but don't get too excited about spring yet. We must still survive our second least favorite time of the motoring year – **Pothole Season**.

Here are a few driving tips to keep you safe and your wheels round:

- Do not tailgate. Stay well back of the vehicle in front of you.
- It is always important to keep your vision high and not always looking downward at the road looking for potholes and debris. Use quick glances to look for dangers on the road surface.
- Stay focused on driving. Being distracted can make you miss seeing or reacting to wheel bending potholes.
- Keep two hands on the steering wheel at the 9 and 3 o'clock position. This gives you the best control to help steer around potholes.
- Do not swerve violently to miss a pothole. Any avoidance maneuvers should be done with smooth steering inputs.
- Be cognizant of oncoming traffic in the event you may want swerve into oncoming lanes to miss a pothole. If opposing traffic is busy, you are better off hitting a pothole rather than hitting oncoming traffic head on!
- Slow down on rough roads to give you a better chance to avoid any potholes. Higher speeds reduce reaction time and control.
- Slow down when you must drive through a pothole but get off the brakes just before encountering the pothole. This will reduce the load on the suspension and the impact force.
- Be careful with water filled potholes as this can mask how deep the hole is or what may be lurking.

Agenda

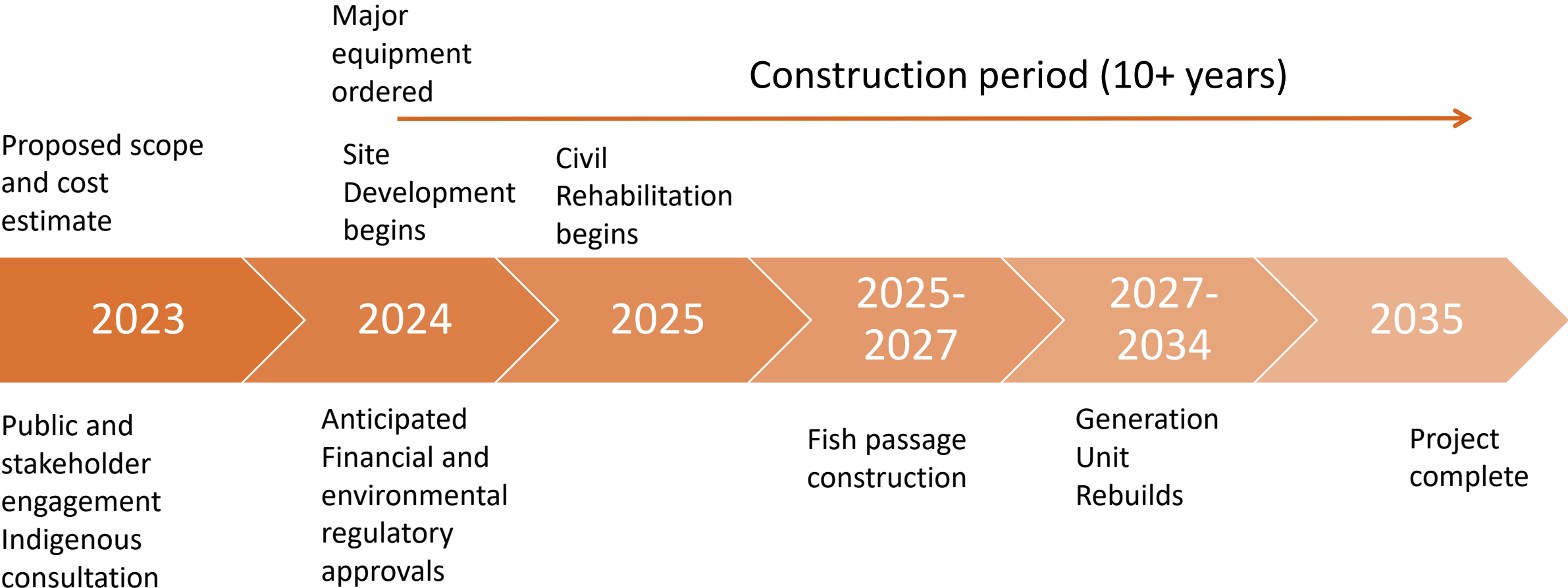
- Welcome and Introduction (Bob Scott)
- Safety Message (Bob Scott)
- Approval of Agenda (All)
 - Review and approval of meeting Minutes
 - Business arising from the minutes
- Mactaquac Lifetime Achievement Update (Krista MacDonald)
- Mactaquac Station Update (Liam O'Dell)
- NB Power Corporate Update (Bob Scott)
- Community Update (All)
- Discussion and Questions (All)
- Adjournment

Mactaquac Life Achievement Project Status Update

March 2023



Major Project Milestones



2023 Workplan

- Spill capacity study - Complete
- Fish Passage Detail Design - Started
- Environmental Impact Assessment - Registration
- Contracting Strategy - Completion
- Final Project Scope - Completion
- T&G Procurement Activities – Start
- General Civil procurement - Start
- Capital Approval - Preparation & Submission
- Labour strategy - Completion
- Design Development



An aerial photograph of a large dam and reservoir, overlaid with a semi-transparent orange filter. The dam is a concrete structure with multiple spillways, situated in a valley. The reservoir extends into the distance, surrounded by green fields and forests. The text "Thank you", "Merci", and "Woliwon" is written in white on the left side of the image.

Thank you
Merci
Woliwon

MACTAQUAC G.S. STATION UPDATE

Liam O'Dell, P. Eng.

Hydro Technical Superintendent

Station Update

- HYDRO GENERATION
- OPERATIONS
- PRE-FRESHET (CURRENT CONDITONS)



Station Update

HYDRO GENERATION

HYDRO REGION

Net Monthly Generation Report

December 31, 2022

Heritage Assets	Current Month - MWH			Year to Date - MWH			Projected Year End		
	Actual	Normal	% of Normal	Actual	Normal	% of Normal	MWH	Normal	% of Normal
Mactaquac	254504	120301	212%	1672696	1413905	118%	1916796	1658005	116%
Beechwood	72263	41400	175%	470340	396896	119%	553641	480197	115%
Grand Falls	43968	42100	104%	344395	357800	96%	438395	451800	97%
Tobique	6019	7440	81%	63204	71740	88%	84024	92560	91%
Milltown	1615	1	161480%	12964	6200	209%	12964	6200	209%
Sisson *	962	1700	57%	11481	9954	115%	20781	19254	108%
Sub-Total	379331	212942	178%	2575080	2256495	114%	3026601	2708016	112%
Non-Heritage Assets									
Nepisiguit	4325	5000	86%	43205	46901	92%	52605	56301	93%
Total Hydro	383656	217942	176%	2618285	2303396	114%	3079206	2764317	111%

HYDRO REGION

Net Monthly Generation Report

January 31, 2023

Heritage Assets	Current Month - MWH			Year to Date - MWH			Projected Year End		
	Actual	Normal	% of Normal	Actual	Normal	% of Normal	MWH	Normal	% of Normal
Mactaquac	167191	78600	213%	1839887	1492505	123%	2005387	1658005	121%
Beechwood	55222	29200	189%	525562	426097	123%	579662	480197	121%
Grand Falls	47354	32900	144%	391749	390700	100%	452849	451800	100%
Tobique	6096	7300	84%	69300	79040	88%	82820	92560	89%
Milltown	1962	1	196180%	14926	6200	241%	14926	6200	241%
Sisson *	3278	2900	113%	14759	12854	115%	21159	19254	110%
Sub-Total	281102	150901	186%	2856183	2407396	119%	3156803	2708016	117%
Non-Heritage Assets									
Nepisiguit	5266	3700	142%	49478	50601	98%	55178	56301	98%
Total Hydro	286368	154601	185%	2905660	2457997	118%	3211980	2764317	116%

HYDRO REGION

Net Monthly Generation Report

February 28, 2023

Heritage Assets	Current Month - MWH			Year to Date - MWH			Projected Year End		
	Actual	Normal	% of Normal	Actual	Normal	% of Normal	MWH	Normal	% of Normal
Mactaquac	73627	67000	110%	1913514	1559505	123%	2012014	1658005	121%
Beechwood	30297	24500	124%	555858	450597	123%	585458	480197	122%
Grand Falls	39662	27100	146%	431410	417800	103%	465410	451800	103%
Tobique	5461	6720	81%	74761	85760	87%	81561	92560	88%
Milltown	1696	1	169560%	16621	6200	268%	16621	6200	268%
Sisson *	3641	3700	98%	18400	16554	111%	21100	19254	110%
Sub-Total	154383	129021	120%	3010565	2536416	119%	3182165	2708016	118%
Non-Heritage Assets									
Nepisiguit	3354	2700	124%	52832	53301	99%	55832	56301	99%
Total Hydro	157737	131721	120%	3063397	2589717	118%	3237997	2764317	117%



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Station Update

UNIT AVAILABILITY UPDATE

- Milltown – 4 units available. Still scheduled for full decommissioning July / 2023.
- Mactaquac – All units are available. Next scheduled outage is on Unit #3 - June / 2023 – Governor & Exciter upgrade.
- Beechwood – All units available.
- Tobique Narrows – Unit 1 is available. Unit #2 is currently off line for major refurbishment project. Scheduled to be back in service mid April / 2023.
- Grand Falls – All units are available except Unit #3 which is currently off line for its pre-freshet maintenance outage. Scheduled back in service March 24 / 2023.
- Sisson – Unit is currently generating as per our Tobique Storage Lake drawdown procedure.
- Nepisiguit Falls – 2 units available, Unit 1 off line for refurbishment.

Station Update

- This past Fall/Winter we experienced above normal river flows which has led to increased generation for NB Power Hydro. December was 176% LTA; January was 185% LTA and February finished at 120% LTA. Current Year End Prediction is 117% LTA.
- DTI is continuing work on the approach channel bridge. The road has been limited to 1 lane to facilitate the repairs and as per GNB 511 website, this restriction will be in effect until November 30 / 2023.
- All NB Power Hydro Stations are currently preparing for this year's freshet. Snow Surveys, Ice Observations, spill gate testing, procedural reviews are just some of the focus work taking place.
- Tobique Storage Lake Drawdown is continuing and on schedule to be completed by the end of March. These Storage lakes (Sisson, Trouser, Long and Serpentine) are all located in the upper basin and drain into the Tobique river. The water is used to supplement typically low winter river flows to allow for additional Hydro generation at our Tobique Narrows, Beechwood and Mactaquac Generating Stations.

Current Conditions

SNOW SURVEYS

SNOW SURVEY DATA

SAINT JOHN RIVER BASIN BETWEEN MACTAQUAC AND BEECHWOOD

DATE: March 14, 2023

LOCATION	DATE	SNOW DEPTH		WATER EQUIVALENT	
		INCHES	CM	INCHES	CM
Shogomoc	2023-03-13	19.4	49.4	5.4	13.8
Belleville-Red Bridge	2023-03-13	12.8	32.4	5.2	13.2
Gibson Millstream	2023-03-13	15.2	38.6	5.2	13.2
Kilmarnock	2023-03-13	17.6	44.8	5.8	14.8
Becaguimec Woods	2023-03-13	18.2	46.2	5.9	15.0
Springfield Woods	2023-03-13	21.7	55	5.6	14.2
Mactaquac	2023-03-13	22.7	57.6	5.7	14.5

Averages				
This Year's Average	18.2	46.3	5.5	14.0
Last Year's Average	16.4	41.7	5.0	12.6
Average Since 1984	19.7	50.3	5.2	13.2

SNOW SURVEY DATA

SAINT JOHN RIVER BASSIN ABOVE BEECHWOOD

DATE: 2023/03/15

Location	Date			Time	Inches	CM	Inches	CM
					Snow Depth		Water Equivalent	
Harrison Ridge	2023	3	14	12:08	27.6	70.2	5.5	14.0
Trouser Lake	2023	3	14	10:24	34.5	87.6	6.9	17.6
Long Lake	2023	3	14	10:41	31.3	79.4	5.7	14.6
Serpentine lake	2023	3	14	11:18	33.6	85.4	7.7	19.6
Sisson Ridge	2023	3	15	10:32	29.2	74.2	6.2	15.8
Oxbow	2023	3	15	10:59	21.7	55.0	5.0	12.6
Haley Brook	2023	3	15	11:20	19.0	48.2	3.4	8.6
Nictau Forks	2023	3	15	12:00	28.8	73.2	5.4	13.6
Mapleview	2023	3	15	10:15	21.5	54.6	4.2	10.6
Tobique	2023	3	15	9:20	26.3	66.8	5.4	13.8
Beechwood	2023	3	15	8:37	20.2	51.2	3.8	9.6
Big Forks	2023	3	13	12:42	28.0	71.0	7.3	18.6
St Quentin #1	2023	3	13	13:32	32.3	82.0	7.9	20.0
St Quentin #2	2023	3	13	13:20	23.1	58.8	7.9	20.0
Grand River	2023	3	13	9:53	22.4	56.8	6.2	15.8
Quisibis	2023	3	13	10:15	27.3	69.4	4.4	11.2
Green River	2023	3	13	10:58	31.4	79.8	4.8	12.2
St Jacques	2023	3	13	11:23	31.3	79.6	5.1	13.0
Grand Falls	2023	3	13	14:31	16.6	42.2	4.6	11.8
Averages					Inches	CM	Inches	CM
This year's average					26.6	67.7	5.7	14.4
Last Year's aver	2022				34.3	87.1	7.3	18.5
Average since 1984					22.6	57.4	5.5	14.0



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Current Conditions

RIVER OBSERVATIONS - NBP DRONE



13:44, Km 24.5. Full ice cover, looking downstream. Showing the Perth-Andover bridge.



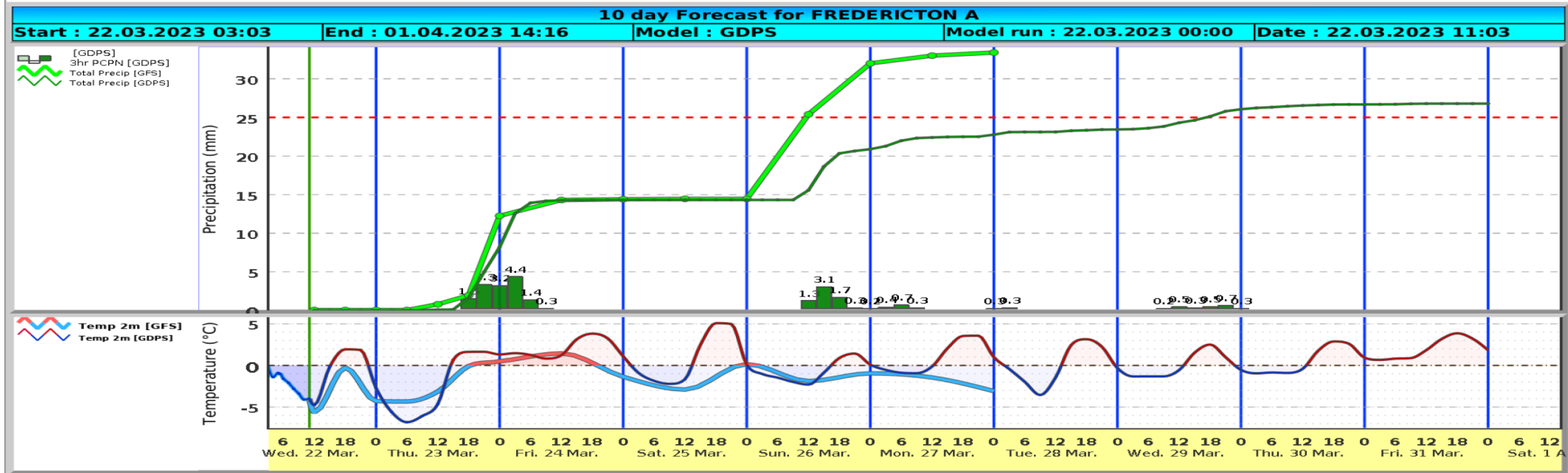
14:06, Km 47. Large open channel, looking downstream. Showing the Brooks bridge.

Current Conditions

WEATHER OUTLOOK

- The current 10-day Forecast is looking ideal with seasonal temperatures and very little liquid precipitation. This will allow for the gradual compaction and melt of the snowpack.

FREDERICTON



NB Power Corporate Update

Bob Scott

Director, Government Relations &
Stakeholder Engagement



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Corporate Update

- Lori Clark Appointed President and Chief Executive Officer (CEO) of NB Power
- NB Power Participates in Home Show's across the province
- AMI Update
- EUB

Community Update

Adjournment

Next Meeting: Thursday, June 22, 2023

A smiling male worker in a red hard hat and safety vest stands in a power plant. The background shows industrial equipment, pipes, and railings.

Thank you
Merci
Woliwon