Commonwealth and Investor Q&A

2016 Series F (Green Bonds), 2016 Refunding Series B,
and 2014 Subseries D-1 (Multi-Modal) Conversion
June 27, 2016

Green Questions

1. Why is the Commonwealth issuing these green bonds as taxable rather than tax-exempt?

   There are multiple goals being accomplished with a taxable issuance. First of all, some use of proceeds items do not qualify for tax-exempt financing. Quantitatively, based on where we see current fixed income ratios and pricing, a taxable transaction is generally attractive, particularly as an index-eligible, single maturity bond which should appeal to taxable institutional investors. From a qualitative perspective, pricing as a taxable transaction also helps us to expand our investor base. Based on these considerations, the taxable financing hits all of our target goals.

2. What is the expected spend-down period for the bond proceeds? For the 2013 issue, it was a couple of years.

   We expect total spend-down within 1 to 2 years—on average within 18 months. We estimate that $120 million or more of the proceeds will be expended immediately as the capital expenditures that these bonds proceeds will reimburse have already been made.

3. Why does the Commonwealth use performance contracting for some of the green projects? It seems that results can be uneven versus in-house contracting.

   All Division of Capital Asset Management and Maintenance ("DCAMM") projects are contracted out. To clarify, Performance Contracting is understood to include two key elements: first, that payments to a vendor are indexed to the savings that the work generates; second, that the investment is made by a third party. The Massachusetts model is slightly different in these two areas. First our projects use performance based contracting. That is, rather than paying a premium for the vendor to provide a guarantee of performance, we have opted to do more in-house management of engineering and project analysis to confirm the validity of the cost/savings estimates. DCAMM manages all of the various parties to develop and ensure performance. Second, using the CEIP financing model, the Commonwealth, not the vendor, provides project financing. This enables us to use low-interest financing, allowing us to maximize investment in cost-saving measures.

The projects are still performance based, in that the whole process, contracts, and payments all have provisions about the performance of the equipment and the achievement of savings. However, it is not traditional Performance Contracting (that is an industry defined term). While we still have a few traditional performance contracts, we have moved away from that model and are using other means to ensure savings.

4. Based on the description of the New Bedford Marine Commerce Terminal in the Preliminary Official Statement, is there a possibility that it may be used frequently for certain non-Green projects in the future. Can you address this?

   While the Marine Commerce Terminal in New Bedford was designed to construct, assemble, and deploy offshore wind projects, the facility was always designed with multiple uses in mind. Three offshore wind developers have leased areas for the development of offshore wind farms in federal waters off the coast of Massachusetts and construction of these offshore wind projects could begin in the next few years. As the U.S. offshore wind industry emerges along the East Coast, the Terminal will handle offshore wind projects as well as other projects and cargo. Because the offshore wind industry is still at an early stage in the U.S., MassCEC is currently seeking initial, interim customers to lease space at the Terminal. At this time, there are two tenants utilizing the Terminal – Excel Recycling, a recycled scrap metal company based in Westport MA, and Southern Light Solar, a New Bedford-based solar installation company. MassCEC has structured the leases of both tenants in order to preserve the Terminal's availability for offshore wind projects in the coming years. While only 10% of the terminal is currently leased to tenants, the facility continues to be marketed to a variety of prospective marine customers during the interim period prior to the full emergence of the offshore wind industry. It is anticipated that when in full use, 100% of the terminal will be used in support of offshore wind projects.

5. How can investors access the green reports?

   The green reports can be accessed through EMMA by using a CUSIP from an outstanding green issue. In addition, reports are also on the mass bondholder website (http://www.massbondholder.com/) on the bottom left of the main page under Key Initiatives. The interim report for the 2013 transaction can be found at http://bit.ly/MAGreen, and the final report for that same transaction can be found at http://bit.ly/MAGreen2.

6. How will bond proceeds be segregated and allocated to green projects only?

   The Governor's Executive Office for Administration & Finance ("A&F") makes the determination as to what projects in the capital plan qualify as green. While the first green bond issuance segregated proceeds from an accounting standpoint, the second transaction (and this one like it) did and will also physically segregate bond proceeds in a separate account. Allocations (reimbursements) are made once requests are submitted by A&F. The actual spending is done on a direct invoice method; the project management teams at the

individual agencies are responsible, in conjunction with A&F and the Comptroller's Office, to code the expenditures properly to ensure that only green projects as identified are funded by these proceeds.

7. Will a green report be published for each deal or will there just be one overall report?

   There will one report published annually and it will be deal specific. Because we don't anticipate issuing new Green bonds until all other Green proceeds have been fully expended, we don't anticipate any overlap in reporting.

8. Can investors access a copy of the roadshow on EMMA or the investor website?

   The roadshow, preliminary official statement, replay call info and ratings reports can all be accessed on our investor website (http://www.massbondholder.com/) under the "Buy Mass Bonds" tab for new deals or by accessing www.buymassbonds.com directly.

9. Have you considered using an outside third party to monitor green deals and projects?

   In discussions with investors during prior deals and during the lead-up to this deal, we determined that maintaining robust reporting practices would be sufficient and that third party certification would not be necessary. However, we welcome thoughts and opinions on this topic from our underwriters and investors. We will also continue to evaluate the possibility of adding third-party certification going forward.

10. How is the new project pipeline for green projects?

    The pipeline is large and steady. We have significant numbers of green projects in the capital plan and expect to have the proceeds of this transaction expended within the next 18 months.

11. Could you give a breakdown by category of where you anticipate spending the green bond proceeds that have not been allocated? Also, what is the breakdown of the expenditures that have already been made?

    While it is difficult to give specific percentages prior to allocation of proceeds, it is expected that once spending is complete, the Energy category will account for 45%-55%, the River Revitalization and Habitat Restoration category will likely account for 10%-25%, Open Space Protection & Environmental Remediation is likely to account for 15%-30%, the New Bedford Marine Commerce Terminal is likely to account for 10%-15% of spending, and for this transaction a very small amount is expected to be allocated to Stormwater Management—likely around 1%. With respect to expenditures that have already been made, percentages fall within those same ranges, with the exception of the New Bedford project which accounts for closer to 20% of current spending. That percentage will gradually decrease as spending in this category is substantially complete.

12. Does the Commonwealth only use green bond proceeds to fund its environmental spending needs?

    No, the Commonwealth uses fairly conservative methods in defining green projects. Therefore, some projects that may be considered green by other issuers (i.e. transportation) are not currently defined as green projects for purposes of proceeds allocation. As such, certain other types of environmental projects are funded by other sources of revenue or other bond proceeds.

13. Could you discuss in greater detail the project selection process for the green bond financing?

    Broadly, as part of the capital planning process, each secretariat will submit a capital financing request to the Governor's Administration and Finance team ("A&F"). A&F will evaluate and prioritize these requests and determine, based on its overall goals and budgetary considerations, the capital projects that are approved for the overall capital plan. With regard to green projects, the Commonwealth has established broad categories/programs that it would consider financing under the green bond program. A&F evaluates each approved project and if they meet the established criteria, categorizes the project as green. The determination of what qualifies for green funding is done at the project level.

14. Is there a cutoff age for older capital expenditures that would cause them to not qualify for green financing?

    For traditional tax-exempt financings, the Commonwealth generally limits spending reimbursement to 18 months or less to ensure that the spending qualifies for tax-exempt financing. This requirement, however, is not in place for the taxable financing. That being said, the Commonwealth doesn't anticipate that the portion of spending that may be "aged out" from a tax-exempt financing perspective would go very far beyond that 18-month threshold. Generally, the Commonwealth has an established practice of not allowing projects to age significantly before they are reimbursed with bond proceeds.

15. For projects in the energy efficiency category, is there some minimum threshold level of energy improvement for the project to qualify as green?

    Most of these projects fall under the Accelerated Energy Program ("AEP"). While the overall goal for the AEP is an average reduction in energy usage of 25%, some projects result in higher reductions (40%-50%) while some result in lower reductions (in the range of 15%).

16. Do you plan to provide updates on how the projects that have been funded by green bonds are performing down the road and the green impact these projects are having in the future when they are up and running?

    We will consider providing periodic updates if that is helpful for investors, but do not currently have plans to report on projects after spending of the bond proceeds has been completed and the final report has been issued.

Credit Questions

17. The Budget Stabilization Fund had begun to recover post-recession but has since flat-lined. What is your target? Do you expect it to fully recover to pre-recession levels and what are the administration's plans for this?

    The goal is to deposit into the Budget Stabilization Fund ("BSF") as prescribed in statute and not withdraw from it for purposes of balancing the budget absent extraordinary circumstances. The administration would like to get to a structurally balanced budget and no longer rely on the BSF or what it deems to be non-recurring revenue. The Governor, Treasurer, and the legislature realize the importance of a strong BSF.

18. How will recent accounting changes to pension funding requirements impact the Commonwealth, and are those payments subject to appropriation?

    Payments are made to the pension fund annually based on a long-term funding schedule that is revised every three years. That schedule is subject to change, again, in January of 2017 and changes to pension payment requirements will be reflected at that time. Pension payments are prescribed by statute through fiscal 2017, and the amount of the annual payment according to the funding schedule is netted from revenues and not made available for the budgeting process.

19. How will the administration adjust the FY17 budget due to the lower revenue estimates? Will there be revenue enhancements or spending cuts?

    The budget is currently in legislative conference, and the administration and legislature are working to address the shortfall. More information will be forthcoming as the budget process unfolds.

20. Please discuss any changes to the state employee retirement benefits in the last ten years? Specifically, have any such changes affected new employees coming into the system and are older employees subject to such changes or grandfathered? A 1973 court ruling affirmed pension benefits for plan participants. Is there a history of challenges by the state with respect to pension benefit commitments?

    There have been some changes which have impacted new employees hired after these changes were implemented. Older employees and retirees are grandfathered. The approach that has been taken with regard to any substantive or material benefit changes since Massachusetts' Supreme Judicial Court issued a decision in the early 1970's is to make such changes for new members of the system. Most recently was the introduction of a new benefit tier for people who become members of a retirement system on or after April 2, 2012.

21. Are other post-employment benefits such as healthcare treated in the same manner and does the Commonwealth view such benefits differently in that they may be changed if economically necessary?

    There have been changes to health insurance coverage, plan offerings and premium contributions with respect to existing active employees and retirees.

22. The current funding schedule has contributions to pension liability growing faster than projected revenues. How does the Commonwealth plan to address this issue?

    The Commonwealth has a statutory framework in place that mandates pension contributions. The pension contributions through fiscal 2017 are not subject to appropriation and are transferred first with only the net revenue available for budgetary purposes. It has been the Legislature's practice in recent years, when a new triennial funding schedule is developed, to lock in the amounts of the first three years of pension payments so that the transfers occur outside of the normal budgetary process. The Commonwealth intends to make the necessary contributions as required by the effective funding schedule and the budgetary process will manage these issues.

23. Is the pension contribution schedule subject to legislative approval and can the legislature make changes to the statutory contributions?

    While the legislature has the authority to make changes by amending pension statute, the legislature does not have any history of taking such measures. The legislature has had no history of rejecting or amending pension payments as prescribed by the funding schedule. It has been the practice in recent years to authorize and mandate the first three years of pension payments, outside of the normal appropriation process, when a triennial pension funding schedule is developed. For many years, the legislative budget process has treated pension contribution, like debt service, as amounts that cannot be disturbed.

24. Could you provide some details on the statutory debt limit and constraints on borrowing?

    The Capital Debt Affordability Committee ("DAC"), established in 2012, annually submits to the Governor and the legislature a report of the amount of new debt which it believes can be affordably issued for the subsequent fiscal year and continually reviews the size and condition of the Commonwealth's tax supported debt as well as debt of other issuing authorities.

    The Commonwealth has two main constraints in place to limit borrowings. The Commonwealth maintains a statutory limit on the amount of direct debt that may be outstanding at any given time. Also by statute, that limit may not increase by more than 5% each year. Additionally, the DAC has a policy in place that limits debt service to 8% of budgeted revenues.

25. Other than the Stabilization Fund, what other funds or reserves does the Commonwealth have at its disposal to manage potential budget shortfalls.

While the Commonwealth has a number of available methods to manage shortfalls, the primary fund that can be used to manage any such extraordinary shortfall is the Stabilization Fund. The Commonwealth does have several special purpose funds that were established for specific programs and purposes. The General fund can only draw these resources if they are within the scope of those defined purposes.

26. Has the Commonwealth identified the reasons behind the shortfall in FY 16 revenues relative to projections?

The Commonwealth has identified the sources of the shortfalls which are largely driven by non-recurring items such as lower investment income/capital gains taxes and higher than anticipated refunds. The Commonwealth believes the underlying economy and revenue base, as evidenced by steady sales taxes, unemployment rate declines, etc. remains stable. The administration and Department of Revenue are closely monitoring the tax receipts and indicators of economic activity as it adjusts its budget and revises its forecasts and are being proactive in responding to changes in the FY17 budgeting process.

27. What are your future plans for issuance of taxable bonds?

The Commonwealth has historically issued taxable bonds for capital spending that does not qualify for tax-exemption such as projects with private use components and spending that has aged beyond the tax-exempt qualification limit. In the recent past, the Commonwealth has significantly improved its allocation process to reduce aged spending, resulting in a reduced need for taxable issuance. Historically, such taxable issuance was done using serial bonds and short maturities.

Based on market conditions and relative cost and benefits of taxable and tax-exempt issuance, the Commonwealth will determine how to best utilize the taxable market and anticipates that it will continue to issue taxable bonds from time to time.

28. What expenditure reductions are expected in FY16?

The Commonwealth has an encumbrance system in place in which budgeted funds are "spoken for" in advance of their expenditure. Encumbrances are monitored on a regular basis for adjustments with a deadline prior to fiscal year-end. The deadline has passed, and now current spending at all agencies is being monitored closely to see what adjustments/reductions can be made. In addition, the Commonwealth has the ability to transfer from certain other funds with balances if the purpose and use of the funds is within the proper scope. All accumulated and unneeded balances are currently being reviewed.

29. What do you anticipate the Budget Stabilization Fund ("BSF") balance will be at fiscal year-end, assuming no drawdowns?

    There are no plans for draws during the remainder of FY16. Under that assumption, unless there are unexpected surplus deposits, the BSF will end the year with the same balance as the beginning of the fiscal year with the addition of interest earned: approximately $1.25 billion. The recent change in the revenue situation may make the potentially for deposit of any surplus revenues unlikely.

30. When do you anticipate returning to making regular automatic deposits to the Budget Stabilization Fund ("BSF")?

    Current budget proposals assumed a deposit to the BSF in FY17, but that may not be possible considering current revenue projections. The first hurdle to cross was to eliminate the use of draws on the BSF to balance the budget. That has been accomplished. The next step will be to make deposits to the BSF. The administration is focused on the need to make regular deposits.

31. Are there any significant healthcare developments for the Commonwealth?

    At this time, we are monitoring Medicaid, which is the largest source of healthcare spending, to identify if it is the most appropriate source of healthcare for all of its users. We are also conducting redeterminations in an effort to check participant eligibility. The increased costs associated with Medicaid were due in part to difficulties in implementing the state's healthcare website, MassHealth. In addition, the Commonwealth is beginning to shift to the federal healthcare model, which should provide healthcare savings. The talented team at Health and Human Services (HHS) is using data-driven analytics to improve efficiency.

32. S&P identified the sales tax holiday as part of the revenue shortfall. Is that correct?

    Yes, the sales tax holiday is part of that shortfall, representing about $25 million.

33. Are there any updates on the Governor's plan for a natural gas pipeline?

    We have no recent updates.

34. What kind of feedback are you getting from investors who have not traditionally bought tax-exempt debt?

    We have had significant positive feedback and interest from taxable and green focused investors who have not previously invested in Mass GO debt.

35. Do you have any plans to lower the discount rate for pension liability calculations to come more in line with corporate pension discount rates?

    The Commonwealth has lowered the discount rate twice in the recent past and anticipates that the current rate of 7.75% will be lowered, again, to 7.5% as a part of the 2016 actuarial valuation. The current discount rate reflects expectations of long term returns for the PRIT retirement funds. PERAC will continue to monitor the investment environment and make recommendations to further modify the discount rate if the investment expectations warrant such changes.

36. Are there local pension plan participants in the PRIT fund?

    There are several local systems who currently participate in the PRIT investment pools. Local systems have the option to participate in the statewide investment pools, and many have elected to do so.

37. Who is responsible for the pension liabilities of these local plans, the state or local municipalities?

    Generally, the local municipalities are responsible for their pension liabilities, the exception being teachers (other than Boston teachers who have their own plan) whose pension liability is the Commonwealth's responsibility.

38. Could you provide more details on the Capital Planning process and expected changes to the capital plan in the future?

    The Commonwealth has a rolling five year capital planning process, which is updated annually. The annual capital budget is created by the administration with input from the various agencies. The Capital Plan is reasonably stable year-over-year and there are generally no major changes as capital needs are fairly constant. The administration has constrained budgeting and capital expenditures in a manner that will limit incremental new money borrowing to $125MM per year going forward.