Renewable Energy Facility Repowering

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The federal government has successfully advanced the development of a viable renewable energy generation market for the US through the use of multiple incentive structures including an investment tax credit ("ITC"), a production tax credit ("PTC"), and for a short period, the 1603 Treasury Grant program in lieu of the ITC. The largest beneficiaries of these incentives have been the solar and wind industries. These incentives are only created on the in-service date of a newly constructed facility; however, a wind project may achieve a second in-service PTC qualification through a "repowering." This paper addresses the valuation analytics associated with the repowering of wind farms and application of the "80/20 Rule" (also referred to as the "80/20 Test" or "80/20 Analysis") for qualifying as a new asset and, accordingly, qualifying for PTC incentives.

Introduction

The Internal Revenue Service's ("IRS") "80/20 Rule" has been utilized to promote economic revitalization and continued growth of certain industry sectors since the late 1960s by affording tax incentives asset owners after the original commercial operation date. The construction of solar farms do not generally provide a platform for a repowering, as the replacement of solar panels typically requires new wiring, purlins, and other balance of system ("BOS") materials to support the latest technology. Typically, solar farms are simply replaced. While we have been involved with the repowering of fuel cell facilities, the great majority of renewable energy project repowering analyses we execute are for wind farms.

Sponsors seeking improved economic performance for their wind farm investments typically pursue technological and capacity upgrades accompanied by new ITC and PTC for their reborn project. At least 80% of a wind facility (as defined below) must be replaced in order to meet the 80/20 Rule and be considered new assets eligible for additional tax credits.

The 80/20 Test

To determine whether a wind farm may be considered "placed in-service" as new, the total Fair Market Value ("FMV") of the Remaining Assets is compared to the total FMV of the New Assets for federal income tax purposes.

The "20" side of the Test considers the components of the original facility that will remain in place after the repowering (the "Remaining Assets"). The FMV of these Remaining Assets are measured as of a current date for the purposes of the 80/20 Rule.

The "80" side of the Test considers the cost of the new/replacement components of the Facility (the "New Assets"). All depreciable costs of the New Assets are considered for the purposes of the 80/20 Test.

IRS Guidance

The IRS published guidance concerning wind project repowering is reflected in Revenue Ruling 94-3 and the more recently published Notice 2016-31 and Notice 2017-04.