Genie Energy Ltd.
Form 10-K
March 21, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K
þ Annual report pursuant to section 13 or 15(d) of the securities exchange act of 1934 for the fiscal year ended December 31, 2012, or

o Transition report pursuant to section 13 or 15(d) of the securities exchange act of 1934.

Commission File Number: 1-35327

Genie Energy Ltd.
(Exact name of registrant as specified in its charter)

Delaware	45-2069276
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

550 Broad Street, Newark, New Jersey 07102
(Address of principal executive offices, zip code)

(973) 438-3500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Class B common stock, par value $.01 per share	New York Stock Exchange
Series 2012-A Preferred stock, par value $.01 per share	New York Stock Exchange

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o	Accelerated filer o
Non-accelerated filer þ	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No þ
The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant, based on the closing price on June 30, 2012 (the last business day of the registrant's most recently completed second fiscal quarter) of the Class B common stock of $7.77 per share, as reported on the New York Stock Exchange, was approximately $118 million.

As of March 13, 2013, the registrant had outstanding 19,498,752 shares of Class B common stock and 1,574,326 shares of Class A common stock. Excluded from these numbers are 44,614 shares of Class B common stock held in treasury by Genie Energy Ltd.

DOCUMENTS INCORPORATED BY REFERENCE

The definitive proxy statement relating to the registrant's Annual Meeting of Stockholders, to be held May 7, 2013, is incorporated by reference into Part III of this Form 10-K to the extent described therein.

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Genie Energy Ltd.

Annual Report on Form 10-K

Part I
As used in this Annual Report, unless the context otherwise requires, the terms “the Company,” “Genie,” “we,” “us,” and “our” refer to Genie Energy Ltd., a Delaware corporation, and its subsidiaries, collectively.

Item 1. Business.

OVERVIEW
Genie Energy, Ltd., a Delaware corporation, owns 99.3% of its subsidiary, Genie Energy International Corporation, or GEIC, which owns 96.4% of IDT Energy and 92% of Genie Oil and Gas, Inc., or GOGAS. Our principal businesses consist of:

IDT Energy, a retail energy provider, or REP, supplying electricity and natural gas to residential and small business customers in the Northeastern United States; and

Genie Oil and Gas, which is pioneering technologies to produce clean and affordable transportation fuels from the world's abundant oil shale and other conventional and unconventional resources, which consists of (1) American Shale Oil Corporation, or AMSO, which holds and manages a 50% interest in American Shale Oil, L.L.C., or AMSO, LLC, our oil shale project in Colorado, and (2) an 89% interest in Israel Energy Initiatives, Ltd., or IEI, our oil shale project in Israel. In addition, on February 20, 2013, another subsidiary, Genie Israel Oil and Gas Ltd. or GIOG, was awarded an exclusive petroleum license by the Government of Israel covering 396.5 square kilometers in the southern portion of the Golan Heights. The grant of the license is subject to challenge by the competing applicant for the license which may be filed within 30 days of the grant.

We have two reportable business segments: IDT Energy and Genie Oil and Gas. Our reportable segments are distinguished by types of service, customers and methods used to provide their services. Financial information by segment and geographic areas is presented under the heading “Business Segment Information” in the Notes to our Consolidated Financial Statements in this Annual Report.

On January 30, 2012, our Board of Directors changed our fiscal year end from July 31 to December 31, in order to better align our financial reporting with our operational and budgeting cycle and with other industry participants. We previously reported the results for our transitional period in a Transition Report on Form 10-Q for the five months from August 1, 2011 to December 31, 2011.

Our main offices are located at 550 Broad Street, Newark, New Jersey 07102. The telephone number at our headquarters is (973) 438-3500 and our web site is www.genie.com.

We make available free of charge through the investor relations page of our web site (http://genie.com/investors/sec-filings/) our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports, and all beneficial ownership reports on Forms 3, 4 and 5 filed by directors, officers and beneficial owners of more than 10% of our equity as soon as reasonably practicable after such material is electronically filed with the Securities and Exchange Commission. We have adopted a Code of Business Conduct and Ethics for all of our employees, including our principal executive officer and principal financial officer. Copies of our Code of Business Conduct and Ethics are available on our web site.

Our web site and the information contained therein or incorporated therein are not incorporated into this Annual Report on Form 10-K or our other filings with the Securities and Exchange Commission.

KEY EVENTS IN OUR HISTORY

Genie was incorporated in January 2011. References to us in the following discussion are made on a consolidated basis as if we existed and owned IDT Energy and Genie Oil and Gas in all periods discussed.

In November 2004, IDT launched IDT Energy in New York State. IDT Energy currently operates in eight utility markets in New York, six utility territories in New Jersey, eight utility territories in Pennsylvania and four utility territories in Maryland. IDT Energy is evaluating opportunities in several additional areas, including Washington, DC, Illinois and Connecticut.

In March 2008, we formed Israel Energy Initiatives, Ltd., which was awarded an exclusive Shale Oil Exploration and Production License in July 2008 by the Government of Israel.

In April 2008, IDT acquired E.G.L. Oil Shale, L.L.C., which was subsequently renamed American Shale Oil, LLC.

In March 2009, a subsidiary of TOTAL S.A., the world's fifth largest integrated oil and gas company, acquired a 50% interest in AMSO, LLC in exchange for cash paid to us of $3.2 million and Total's commitment to fund the majority of AMSO, LLC's research, development and demonstration expenditures as well as certain other funding commitments.

On February 20, 2013, the Government of Israel awarded our subsidiary, Genie Israel Oil and Gas, Ltd., an exclusive petroleum exploration license covering 396.5 square kilometers in the Southern portion of the Golan Heights

Spin-Off from IDT Corporation
We were formerly a subsidiary of IDT Corporation, or IDT. On October 28, 2011, we were spun-off by IDT and became an independent public company through a pro rata distribution of our common stock to IDT's stockholders, which we refer to as the Spin-Off. As a result of the Spin-Off, each of IDT's stockholders received: (i) one share of our Class A common stock for every share of IDT's Class A common stock held of record on October 21, 2011, or the Record Date, and (ii) one share of our Class B common stock for every share of IDT's Class B common stock held of record on the Record Date. On October 28, 2011, 1.6 million shares of our Class A common stock, and 21.1 million shares of our Class B common stock were issued and outstanding.

Prior to the Spin-Off, IDT made a capital contribution of $82.2 million to us. In addition, in connection with the capital contribution received from IDT, the amount due from IDT as of the date of the Spin-Off of $2.1 million was forgiven.

Exchange Offer and Issuance of Preferred Stock
On August 2, 2012, we initiated an offer to exchange up to 8.75 million outstanding shares of our Class B common stock for the same number of shares of a new series of preferred stock. The exchange offer was made upon the terms and conditions set forth in the Offer to Exchange, and the related Letter of Transmittal, as amended, which were filed with the Securities and Exchange Commission, or SEC. The offer expired on October 10, 2012. On October 11, 2012, we filed a Certificate of Designation with respect to our Series 2012-A Preferred Stock with the Secretary of State of Delaware. On October 17, 2012, we issued 1,604,591 shares of our newly designated Series 2012-A Preferred Stock, par value $0.01 per share, in exchange for an equal number of shares of Class B common stock tendered in the exchange offer.

RECENT DEVELOPMENTS

Renewed Exchange Offer
On November 26, 2012, we commenced an offer to exchange up to 7,145,409 outstanding shares of our Class B Common Stock for the same number of shares of Series 2012-A Preferred Stock. This was a renewal of the prior offer described above that expired on October 10, 2012. The offer expired on March 5, 2013. On March 11, 2013, we issued 313,376 shares of our Series 2012-A Preferred Stock in exchange for an equal number of shares of Class B common stock tendered in the exchange offer.

Dividends
The aggregate dividends declared in the year ended December 31, 2012 and the five months ended December 31, 2011 were $3.1 million and $1.1 million, respectively, and the aggregate dividends paid in the year ended December 31, 2012 was $4.2 million, as follows:

On January 5, 2012, we paid a cash dividend of $0.05 per share to stockholders of record at the close of business on December 22, 2011 of our Class A common stock and Class B common stock;

On April 3, 2012, we paid a cash dividend of $0.033 per share to stockholders of record at the close of business on March 26, 2012 of our Class A common stock and Class B common stock. The dividend paid on April 3, 2012 was for the two-month period of November and December 2011 that represented the period between the end of our prior fiscal quarter and the beginning of the new fiscal quarter in connection with the change in our fiscal year to a calendar year, and represented a pro-rated dividend of 2/3rd of the normal quarterly dividend.

On May 30, 2012, we paid a cash dividend of $0.05 per share to stockholders of record at the close of business on May 21, 2012 of our Class A and Class B common stock.

On August 28, 2012, we paid a cash dividend of $0.05 per share to stockholders of record at the close of business on August 20, 2012 of our Class A and Class B common stock.

On February 15, 2013, we paid a pro-rated Base Dividend of $0.1317 per share on our Series 2012-A Preferred Stock for the fourth quarter of 2012. The aggregate amount paid was $0.2 million. In connection with the completion of the exchange offer and issuance of the Series 2012-A Preferred Stock, we have suspended payment of dividends on our Class A and Class B common stock for the foreseeable future.

Further on March 13, 2013, our Board of Directors declared a quarterly Base Dividend of $0.1594 per share on our Series 2012-A Preferred Stock for the first quarter of 2013. The dividend will be paid on May 15, 2013 to stockholders of record as of the close of business on May 8, 2013.

Loan Agreement with JPMorgan Chase Bank

In April 2012, we and IDT Energy entered into a Loan Agreement with JPMorgan Chase Bank for a revolving line of credit for up to a maximum principal amount of $25.0 million. The proceeds from the line of credit may be used to provide working capital and for the issuance of letters of credit. We agreed to deposit cash in a money market account at JPMorgan Chase Bank as collateral for the line of credit equal to the greater of (a) $10.0 million or (b) the sum of the amount of letters of credit outstanding plus the outstanding principal under the revolving note. Outstanding principal and interest is due on April 30, 2013. At December 31, 2012, there were no amounts borrowed or utilized for letters of credit under the line of credit, and cash collateral of $10.0 million was included in "Restricted cash" in the consolidated balance sheet.

IDT Energy

In November 2004, IDT launched a retail energy business, IDT Energy, which has since experienced significant growth. IDT Energy operates our energy service company that resells natural gas and electricity to residential and small business customers in eight utility markets in New York, six utility territories in New Jersey, eight utility territories in Pennsylvania and four utility territories in Maryland. IDT Energy is evaluating opportunities in several additional areas, including Washington, DC, Illinois and Connecticut.

IDT Energy's business, particularly its sales of natural gas, is a seasonal business. Approximately 47% of IDT Energy's natural gas revenues in the year ended December 31, 2012 was generated during the three months ended March 31, 2012, when the demand for heating was highest as compared to 50% in the same period in the year ended December 31, 2011. The demand for electricity is not as seasonal as natural gas, but is higher during IDT Energy's third quarter when air conditioning usage peaks. Revenues from sales of electricity in the three months ended September 30, 2012 represented approximately 34% of total revenues from electricity sales in the year ended December 31, 2012 as compared to 35% of total revenues from electricity sales in the same period in the year ended December 31, 2011.

In the year ended December 31, 2012, IDT Energy generated revenues of $229.5 million comprised of $174.3 million from sales of electricity and $55.2 million from sales of natural gas, as compared with revenues of $197.9 million in the year ended December 31, 2011. IDT Energy's revenues represent 100% of our total consolidated revenues since our inception. In addition in the year ended December 31, 2012, IDT Energy had operating income of $25.0 million, as compared with operating income of $19.6 million in the year ended December 31, 2011.

Customers

IDT Energy's services are made available to customers under its standard terms and conditions, offering primarily a variable rate via automatically renewing or month-to-month agreements, which enable it to recover its costs for electricity and natural gas through adjustments to the rates charged to its customers. The frequency and degree of these adjustments are determined by IDT Energy, and are not subject to regulation. While IDT Energy's contract rates are not subject to regulation, IDT Energy is required to comply with various reporting requirements in order to maintain eligibility to operate as a REP. Certain jurisdictions require IDT Energy to publish its customer offers with the applicable public service commission, or PSC, as an administrative matter. The electricity and natural gas IDT Energy sells are generally metered and delivered to IDT Energy customers by the local utilities. As such, IDT Energy does not have a maintenance or service staff for customer locations. These utilities also provide billing and collection services for the majority of IDT Energy's customers on its behalf. For a small number of direct bill customers, IDT Energy performs its own billing and collection. Additionally, IDT Energy's receivables are generally purchased by the utilities in whose areas IDT Energy operates for a percentage of their face value (as of December 31, 2012, approximately 98%) in exchange for the utility receiving a first priority lien in the customer receivable without recourse against IDT Energy.

IDT Energy markets its energy services primarily through direct marketing methods, including door-to-door sales, outbound telemarketing, direct mail and Internet signup. As of December 31, 2012, IDT Energy serviced 502,000 meters (331,000 electric and 171,000 natural gas), as compared to 438,000 meters (254,000 electric and 184,000 natural gas) as of December 31, 2011. The New York State Public Service Commission, or NYPSC, as published on its website in April 2012 for natural gas and May 2012 for electric, indicates that approximately 21.0% (electric) and 18.9% (gas) of eligible New York customers participated in the deregulation of the market by migrating from a utility to a REP. In New York, Pennsylvania and New Jersey territories, IDT Energy has captured over 10% of the migrated share.

IDT Energy's strategy is to acquire profitable customers in low-risk markets, specifically where the utilities have adopted a portfolio of REP-friendly, regulatory-driven programs. Key among these programs is purchase of receivables, or POR programs where utilities are contractually obligated to purchase customer receivables at a pre-determined fixed discount. Under POR programs, utilities offer consolidated billing, where the utilities have the responsibility of billing the individual customer and the subsequent collections of the remittances. Additionally, we target markets in which we can procure energy in an efficient and transparent manner. We seek to purchase wholesale energy where there is a real time market that reflects a fair price for the commodity for all participants. This, coupled with IDT Energy's strategy to primarily sell a variable-rate product, allows IDT Energy to reflect a true market cost base and opportunistically vary its rates to its customers taking into account its competitors who are purchasing their commodity at longer intervals.

Utilities in New York, Pennsylvania and Maryland offer POR programs without recourse that permit customers with past-due balances to remain in the POR program. However, utilities in New Jersey generally do not permit customers with past-due balances to enroll in their POR programs, and, in the case of PSE&G, remain in their POR programs, which means that after a certain amount of time (determined based on the specific commodity), IDT Energy becomes responsible for the billing and collection of the commodity portion of the future invoices for its delinquent customers. IDT Energy may switch the customer back to the utility at its choosing; the process can typically be accomplished before IDT Energy needs to send an invoice, however it can take one to two billing cycles to complete.

IDT Energy also regularly monitors other deregulated or deregulating markets to determine if they are appropriate for entry, and may initiate the licensing process in a selected region should deregulated conditions develop favorably.

Acquisition and Management of Gas and Electric Supply
Since 2009, IDT Energy has been party to a Preferred Supplier Agreement with BP Energy Company, or BP, pursuant to which BP is IDT Energy's preferred provider of electricity and natural gas. The agreement allows for purchases of electricity and natural gas for customers in areas where the utilities have POR programs, and includes a one-time inclusion of existing IDT Energy customers not covered by a POR program. Under the arrangement, IDT Energy purchases electricity and natural gas at market rate plus a fee. IDT Energy's obligations to BP are secured by a first security interest in deposits or receivables from utilities in connection with their purchase of IDT Energy's customer's receivables under the applicable POR program, and in any cash deposits or letters of credit posted in connection with any collateral accounts with BP. Effective January 20, 2010, the agreement with BP was amended to cover the territories in which we operate in New Jersey and Pennsylvania. Effective October 1, 2010, the agreement with BP was modified and extended with a new termination date of June 30, 2014, and with an automatic renewal for an additional year unless either party provides written notice to the other party at least six months prior to June 30, 2014 that it will not renew the agreement. IDT Energy's ability to purchase electricity and natural gas under this agreement is subject to satisfaction of certain conditions including the maintenance of certain covenants.

IDT Energy is required to meet certain minimum green energy supply criteria in some of the markets in which it operates. IDT Energy has met those thresholds by acquiring renewable energy certificates (REC's). In addition, IDT Energy offers green energy products to its customers in several territories. IDT Energy acquires green energy conversion rights or attributes and REC's to satisfy the load requirements for these customers.

As a REP, IDT Energy does not own electrical power generation, transmission, or distribution facilities, or natural gas production, pipeline or distribution facilities. Besides BP, IDT Energy currently contracts with Dominion Transmission, Inc., National Fuel Supply, Williams Gas Pipeline and Texas Eastern Transmission and others for natural gas pipeline, storage and transportation services, and utilizes the New York Independent System Operator, Inc., or NYISO, and PJM Interconnection, LLC, or PJM, for electric transmission and distribution. NYISO operates the high-voltage electric transmission network in New York State, and administers and monitors New York's wholesale electricity markets. PJM is a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of thirteen states (including New Jersey, Pennsylvania and Maryland) and the District of Columbia.

For risk management purposes, IDT Energy utilizes forward physical delivery contracts for a portion of its purchases of electricity and natural gas, which are defined as commodity derivative contracts. In addition, IDT Energy enters into put and call options as hedges against unfavorable fluctuations in market prices of electricity and natural gas.

The NYISO and PJM perform real-time load balancing for each of the electrical power grids in which IDT Energy operates. Similarly, load balancing is performed by the utilities or local distribution company, or LDC, for each of the natural gas markets in which IDT Energy operates. Load balancing ensures that the amount of electricity and natural gas that IDT Energy purchases is equal to the amount necessary to service its customers' demands at any specific point in time. IDT Energy is charged or credited for balancing the electricity and natural gas purchased and sold for its account by its suppliers and the LDCs. IDT Energy manages the differences between the actual electricity and natural gas demands of its customers and its bulk or block purchases by buying and selling in the spot market, and through monthly cash settlements and/or adjustments to future deliveries in accordance with the load balancing performed by utilities, LDCs, NYISO and PJM.

Competition

IDT Energy competes with the local utility companies in the areas where it provides service, including the wholly-owned retail subsidiaries of the utilities. Some utilities have affiliated companies that are REPs, and compete in the same markets that IDT Energy operates. IDT Energy also competes with several large vertically integrated energy companies as well as many independent REPs. Some of these competitors or potential competitors may be larger and better capitalized than IDT Energy. The competition with the utilities and REPs exposes IDT Energy to the risk of losing customers, especially since IDTE’s residential customers generally do not sign term contracts.

There are many licensed REPs in each of the markets in which we operate. In each major utility service territory there are several REPs serving residential natural gas customers and residential electric customers. While it is unclear whether there will be new entrants in these markets, IDT Energy believes REP competition in the residential market (which represents the principal market focus for IDT Energy) is not as intense as in the commercial and industrial markets because the majority of REPs, unlike IDT Energy, have focused their activities on the commercial and industrial markets, which are comprised of larger customers who prefer to enter into longer term contracts with fixed rates.

Increasing our market share depends in part on our ability to persuade customers to switch to IDT Energy's service. Local utilities have certain advantages such as name recognition, financial strength and long-standing relationships with customers. Persuading potential customers to switch to a new supplier of such an important service is challenging. If IDT Energy is not successful in convincing customers to switch, our REP business, results of operations and financial condition will be adversely affected.

Regulation

IDT Energy currently operates in eight utility markets in New York, six utility territories in New Jersey, eight utility territories in Pennsylvania and four utility territories in Maryland. IDT Energy is in various stages of obtaining licenses in other states and specific utilities within those territories. The State of New York, the Commonwealth of Pennsylvania, the State of New Jersey, the State of Maryland, the federal government, and related public service commissions, among others, establish the rules and regulations for our REP operations. Like all REPs, IDT Energy is affected by the actions of governmental agencies, mostly on the state level by the respective state Public Service Commissions, and other organizations (such as NYISO and PJM) and indirectly the Federal Energy Regulatory Commission, or FERC. Regulations applicable to electricity and natural gas have undergone substantial change over the past several years as a result of restructuring initiatives at both the state and federal levels. IDT Energy may be subject to new laws, orders or regulations or the revision or interpretation of existing laws, orders or regulations. Further, if IDT Energy enters markets outside of the utility regions within which it currently operates in New York, New Jersey, Pennsylvania and Maryland, or markets outside of these states, it would need to be licensed and would be subject to the rules and regulations of such states or municipalities and respective utilities.

Employees

As of March 1, 2013, IDT Energy employs 73 full time employees, 58 of whom are located in the Jamestown, New York office, of which approximately 90% are affiliated with the customer care center.

Genie Oil and Gas, Inc.

Genie Oil and Gas, which is pioneering technologies to produce clean and affordable transportation fuels from the world's abundant oil shale and other conventional and unconventional resources, consists of (1) American Shale Oil Corporation, or AMSO, which holds and manages a 50% interest in American Shale Oil, L.L.C., or AMSO, LLC, our oil shale project in Colorado, and (2) an 89% interest in Israel Energy Initiatives, Ltd., or IEI, our oil shale project in Israel. In addition, in February 2013, another subsidiary, Genie Israel Oil and Gas Ltd., or GIOG, was awarded an exclusive petroleum license by the Government of Israel covering 396.5 square kilometers in the southern portion of the Golan Heights. The grant of the license is subject to challenge by the competing applicant for the license which may be filed within 30 days of the grant.

American Shale Oil Corporation

American Shale Oil Corporation, or AMSO, was formed as a wholly owned subsidiary of ours in February 2008. AMSO's initial entry into the oil shale business occurred in April 2008, when AMSO acquired a 75% equity interest in E.G.L. Oil Shale, L.L.C. (which was subsequently renamed American Shale Oil, LLC, or AMSO, LLC) in exchange for cash of $2.5 million and certain commitments for future funding of AMSO, LLC's operations. In a separate transaction in April 2008, IDT acquired an additional 14.9% equity interest in AMSO, LLC in exchange for cash of $3.0 million, bringing our and IDT's total interest in AMSO, LLC to approximately 90%. In March 2009, a subsidiary of TOTAL S.A., or Total, the world's fifth largest integrated oil and gas company, acquired a 50% interest in AMSO, LLC in exchange for cash paid to us of $3.2 million and Total's commitment to fund the majority of AMSO, LLC's research, development and demonstration, or RD&D, expenditures as well as certain other funding commitments. Immediately prior to this transaction, all owners (including IDT's 14.9% direct equity interest) other than AMSO exchanged their ownership interest for a proportionate share of a 1% override on AMSO, LLC's future revenue. IDT assigned the cash proceeds of its override interest to the IDT U.S. Oil Shale Charitable Distribution Trust, subject to certain remainder interests retained by Genie. After the consummation of the Total transaction, AMSO owned 50% of AMSO, LLC.

According to the terms of the transaction, AMSO will operate the project during the RD&D phase. Total will provide a majority of the funding during this phase of the project, and technical and financial assistance throughout the RD&D and commercial stages of the project. Total will lead the planning of the commercial development and will assume management responsibilities during the subsequent commercial phase.

Oil shale is an organic-rich, fine-grained sedimentary rock that contains significant amounts of kerogen (a solid mixture of organic chemical compounds) from which liquid hydrocarbons can be extracted. However, extracting oil and gas from oil shale is more complex than conventional oil and gas recovery and is more expensive. Rather than pumping it directly out of the ground in the form of liquid oil, the oil shale can be mined and then heated to a high temperature through a process called surface retorting, with the resultant liquid separated and collected. An alternative which AMSO, LLC and others are researching and developing is in-situ retorting, which involves heating the oil shale to a temperature of approximately 660°F while it is still underground, and then pumping the resulting liquid and/or gases to the surface. In-situ retorting is considered to be less environmentally invasive than surface retorting and can offer significant economic advantages.

According to reports from the United States Department of Energy, or DOE, oil shale resources in the United States are estimated at over 2 trillion barrels, and based on management estimates, could potentially supply the U.S.'s demand for liquid fuel over the next 100 years. The majority of those deposits are found in the Green River Formation of Colorado (Piceance Creek Basin), Utah (Uinta Basin) and Wyoming (Green River and Washakie Basins). In March 2009, the U.S. Geological Survey, or USGS, reported that the total "in-place" oil in the Colorado's Piceance Basin is approximately 1.525 trillion barrels. The majority of those deposits are found in the Green River Formation of Colorado (Piceance Creek Basin), Utah (Uinta Basin) and Wyoming (Green River and Washakie Basins). Colorado's Piceance Basin, where AMSO, LLC's RD&D lease is located as described below, contains some of the richest oil shale resources in the world (as reported by DOE and USGS sources).

In 2005, the U.S. Bureau of Land Management, or BLM, began implementation of the Energy Policy Act passed by Congress, seeking proposals from the private sector to develop the oil shale resources in economically and environmentally responsible ways. In June 2005, nominations were solicited and twenty proposals were submitted, including the proposal of E.G.L. Resources, Inc., or EGL Resources. The proposals, which included technical operational plans, were evaluated by an inter-disciplinary team including representatives from the affected states, as well as the DOE and the Department of Defense. A central feature of EGL Resource's proposal was the then patent pending in-situ oil shale extraction process, Conduction, Convection, Reflux, or CCR, currently AMSO, LLC's U.S. Patent 7,743,826. Further, proposals were subjected to environmental analysis under the terms of the National Environmental Policy Act and brought before public meetings in Colorado and Utah. The BLM issued a Finding of No Significant Impact for EGL Resources' proposed plan of operations; and effective January 1, 2007, EGL Resources received a lease for research, development and demonstration, or RD&D Lease, in western Colorado, which it assigned to its affiliate, E.G.L. Oil Shale, L.L.C. ("EGL"). Out of twenty applications for RD&D Leases submitted, three companies were awarded leases in Colorado to test in-situ technologies (Shell, Chevron and EGL), and one company in Utah (OSEC) was awarded a lease for testing above ground retorting processes. In April 2008, EGL was acquired by AMSO and IDT and subsequently renamed American Shale Oil, LLC.

The RD&D Lease awarded by the BLM to EGL Resources and acquired by AMSO, LLC covers an area of 160 acres. The lease runs for a ten-year period beginning on January 1, 2007, and is subject to an extension of up to five years if AMSO, LLC can demonstrate that a process leading to the production of commercial quantities of shale oil is diligently being pursued. If AMSO, LLC can demonstrate the economic and environmental viability of its technology, it will have the opportunity to submit a one-time payment pursuant to the applicable regulations and convert its RD&D Lease to a commercial lease on 5,120 acres which overlap and are contiguous with the 160 acres covered by its RD&D Lease. AMSO, LLC's initial plan is to target the illite-rich mining interval where the "illite" rich oil shale is located. As technologies are developed to facilitate environmentally sound extraction processes from additional areas of the oil shale formation, we would expect to pursue the remaining reserves within our commercial lease.