



Blackstart Settlement Changes

Customer Training Web Conference

Tammy Brakey

SETTLEMENTS ANALYST

Newly Introduced Acronyms

- DBR – Designated Blackstart Resource
- O&M – Operations & Maintenance
- MVA – Megavolt Ampere
- CIP – Critical Infrastructure Protection



Course Goals

- Provide a high level overview of the changes to Blackstart Service Compensation.
- Provide examples for calculating a Blackstart Resource's payment.
- List the new MIS reports.
- Provide references for additional information.



Topics

- Introduction to Blackstart Changes (why/what/dates)
- Eligibility Requirements for Payment
- New Terms of Blackstart Service
- Obligations
- How Failure to Meet Blackstart Service Obligations Affects Payments
- Blackstart Service Payments and Appendix A
- Monthly Blackstart Service Charge
- Market Information Server (MIS) Reports
- New Blackstart Service Line Item on Your Bill

Why Change Blackstart?

Existing Schedule 16 requires the ISO evaluate compensation and either justify it or develop a new plan.

Results:

- A new plan was developed to improve the system restoration process.
- A new compensation structure was developed to support that plan.
 - Provides for the payment of incremental capital and operating costs, including Critical Infrastructure Protection (CIP) costs.



Changes to the Blackstart Program

- Blackstart Resources were eligible for CIP compensation beginning June 2012.
- Schedule 16 changes will occur in 2013.
- Designated Blackstart Resources (DBR) will have new operational requirements, which are detailed in OP11.
- Compensation will be made according to the Blackstart Resource size and starting requirement.
- Blackstart payments can be reduced for Failure to Maintain the unit or Failure to Perform during a system restoration.

Today's web conference will cover **settlement** changes to the Blackstart Program in 2013.



ELIGIBILITY REQUIREMENTS FOR PAYMENT



Eligibility Requirements for Payment



- Blackstart Owner must offer a Resource and be accepted to provide Blackstart Service.
- Blackstart Owner and Resource must meet Blackstart Service Minimum Criteria.
- Blackstart Service Commitment must be established between the Blackstart Owner and the ISO.
- Designated Blackstart Resource must meet the eligibility requirements defined in OP11.

Changes to Schedule 16 Compensation



- Revised Proxy Rates
 - Operations & Maintenance (O&M) Costs
 - Capital Costs
 - Proxy Costs for retrofitting units
 - CIP Capital and O&M Costs
 - Annual adjustment based on Handy-Whitman indexes.
- Rate Classes are dependant on the size of the unit (measured in MVA) and the required starting source.
- There is an option to file Station-specific Blackstart Service Rates with the Commission through a Section 205 Filing.

NEW CATEGORIES AND COMPENSATION STRUCTURE OF BLACKSTART SERVICE



New Categories of Blackstart Service

Category A

- consists of current Blackstart Resources.
- shall continue under the term in effect as of 12/31/2012.

Category B

- begins on or before the completion of the current contract term.
- is by mutual agreement between the Blackstart Owner and the ISO.
- will be the category for all New Blackstart Resources after 1/1/2013.

Terms of Blackstart Service

Category A

Category B

Term:	Shall continue/exist until the current term expires.	<ul style="list-style-type: none"> • Open-term has no predetermined length of time to be in the program. • Minimum Period Open term has an open-ended commitment requiring a minimum length of time to remain in the program. • Specified-Term has a specific commitment period.
Termination:	<p>Can be terminated with one year notice from the Blackstart Owner or the ISO, <i>except:</i></p> <ul style="list-style-type: none"> • in Force Majeure – one year notice may be waived. • if there is a FERC imposed Requirement of Determination to be a Critical Asset – following FERC Approval of requirement, 90 day notice. 	<ul style="list-style-type: none"> • Mutual Termination – no notice requirement. • Unilateral Termination – two year notice. • Force Majeure – requirement waived. • Failure to Maintain or Failure to Perform – 90 day notice.

OBLIGATIONS

Obligations

- **Designated Blackstart Resource (DBR) shall:**
 - follow ISO and LCC dispatch instructions during the restoration.
 - maintain the Resource in accordance with ISO Operating Documents.
 - test at least once every 12 months.
- **Blackstart Owner shall:**
 - *not* enter into any agreement, arrangement, or procedure that conflicts with the resources ability to provide Blackstart Service.
 - be able to take the resource out of operation in accordance with the planned outage schedule.
 - notify the ISO and LCC of any outage that affects the ability to provide Blackstart Service.
 - maintain documentation of its procedures and training for starting the resource, energizing a de-energized bus and maintaining voltage and frequency during a restoration.

HOW FAILURE TO MEET BLACKSTART SERVICE OBLIGATIONS AFFECTS PAYMENTS



Blackstart Failures

Types

- Failure to Maintain Blackstart Capability
- Failure to Perform During a System Restoration

Blackstart Failures

Required Actions

- Notify the ISO and LCC as soon as practicable **and** within 15 minutes of identifying a failure.
- File a correction plan with the ISO if the failure(s) are expected to last longer than 30 days.

“A Blackstart Owner shall notify the ISO and LCC as soon as practicable and within 15 minutes of identifying a failure or inability of a Designated Blackstart Resource to meet the Blackstart Service Minimum Criteria and Blackstart Service obligations specified in Schedule 16 and the ISO Operating Documents pertaining to Blackstart Service.”



Correcting Blackstart Failures

- Grace period
 - 30 days
 - 60 days
- Correction plan
 - If more than 30 days to correct, must file a correction plan
 - Plan reviewed, then accepted or rejected by ISO-NE



Suspension of Payments

Failure to Maintain Blackstart Capability

- If not corrected within **30** days, results in loss of O&M Payment retroactive to the date of the failure.
- If not corrected within **60** days or the correction plan date, (whichever is *later*) – results in loss of Capital Payment effective with the later date.
- Payments will resume effective with the date of the correction.

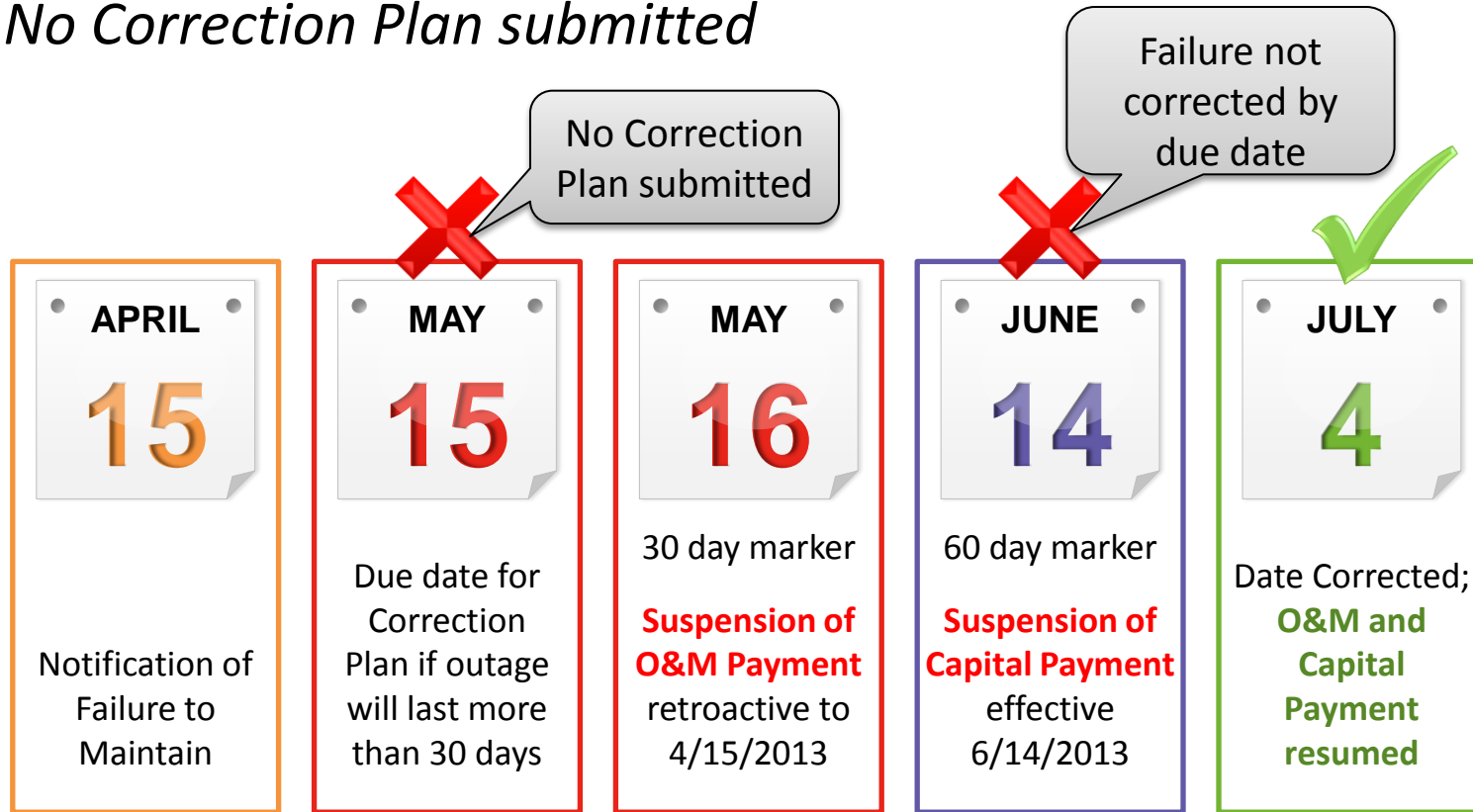
Failure to Perform During a System Restoration

- Results in loss of O&M and Capital Payments effective from the date of failure.
- Payments will resume effective with the date of the correction.



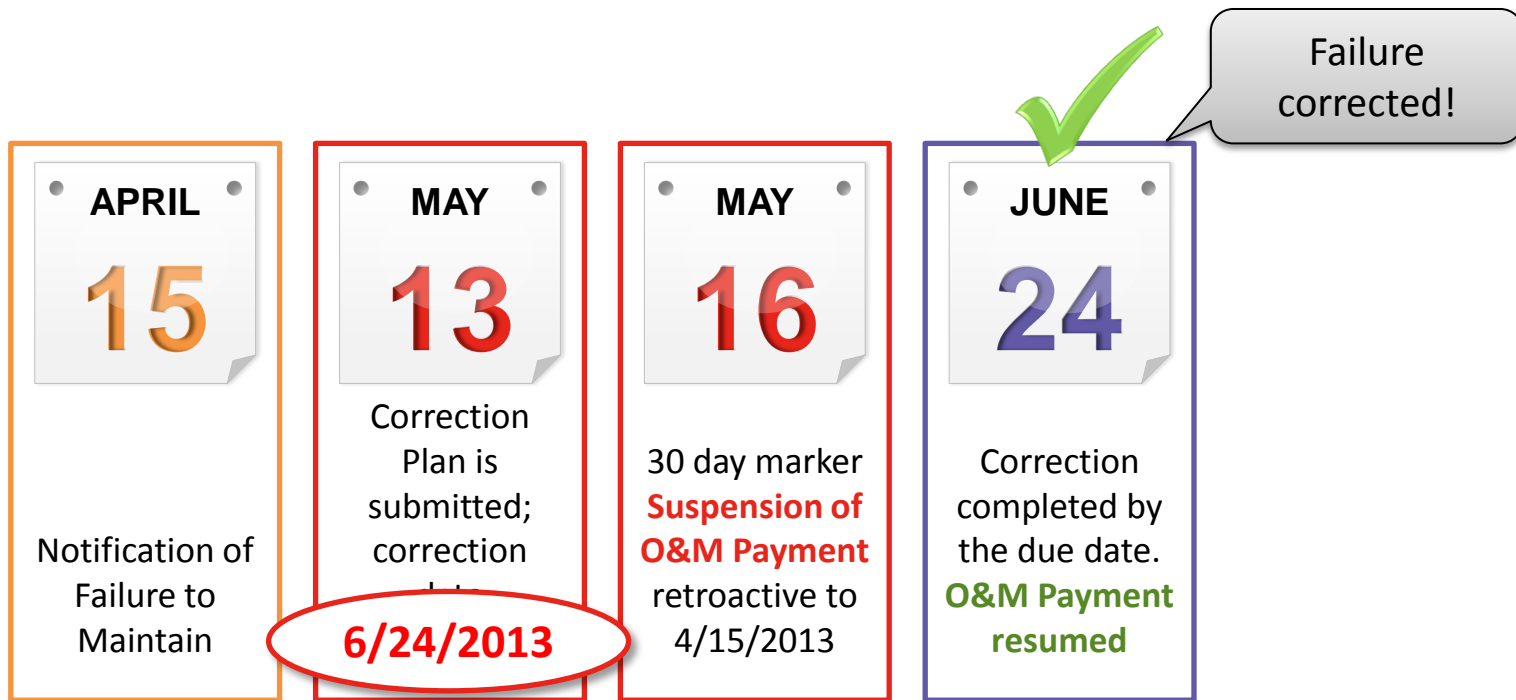
Suspension of Payments Example 1

No Correction Plan submitted



Suspension of Payments Example 2

Failure corrected by deadline



Suspension of Payments Example 3

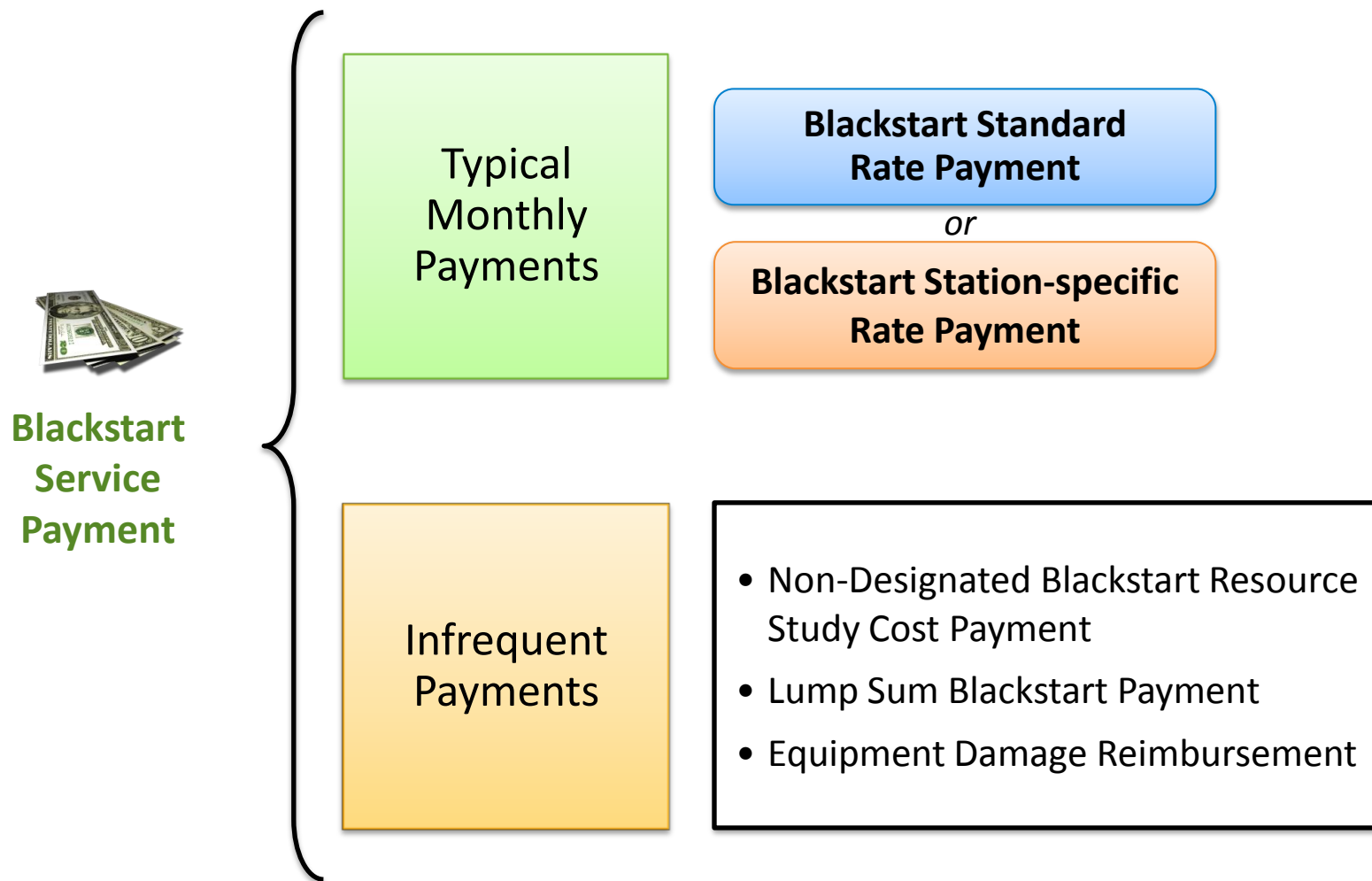
*Failure **not** corrected by deadline*



BLACKSTART SERVICE PAYMENTS AND APPENDIX A



Blackstart Service Payments



OATT Schedule 16 Blackstart Service Payment

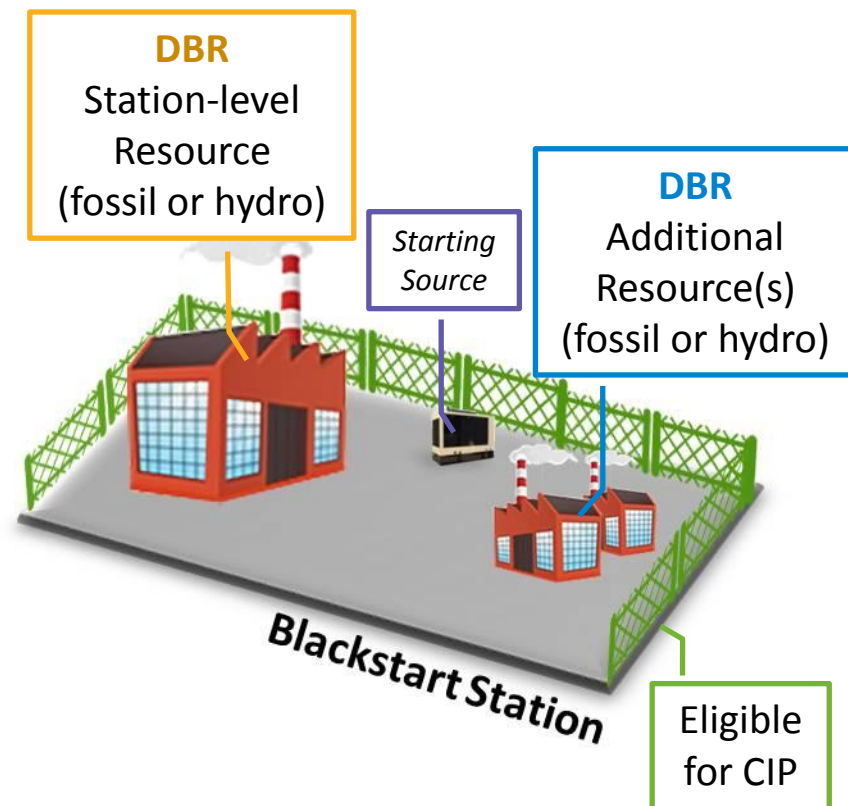
Calculating the Blackstart Standard Rate Payment

Blackstart Standard Rate Payment

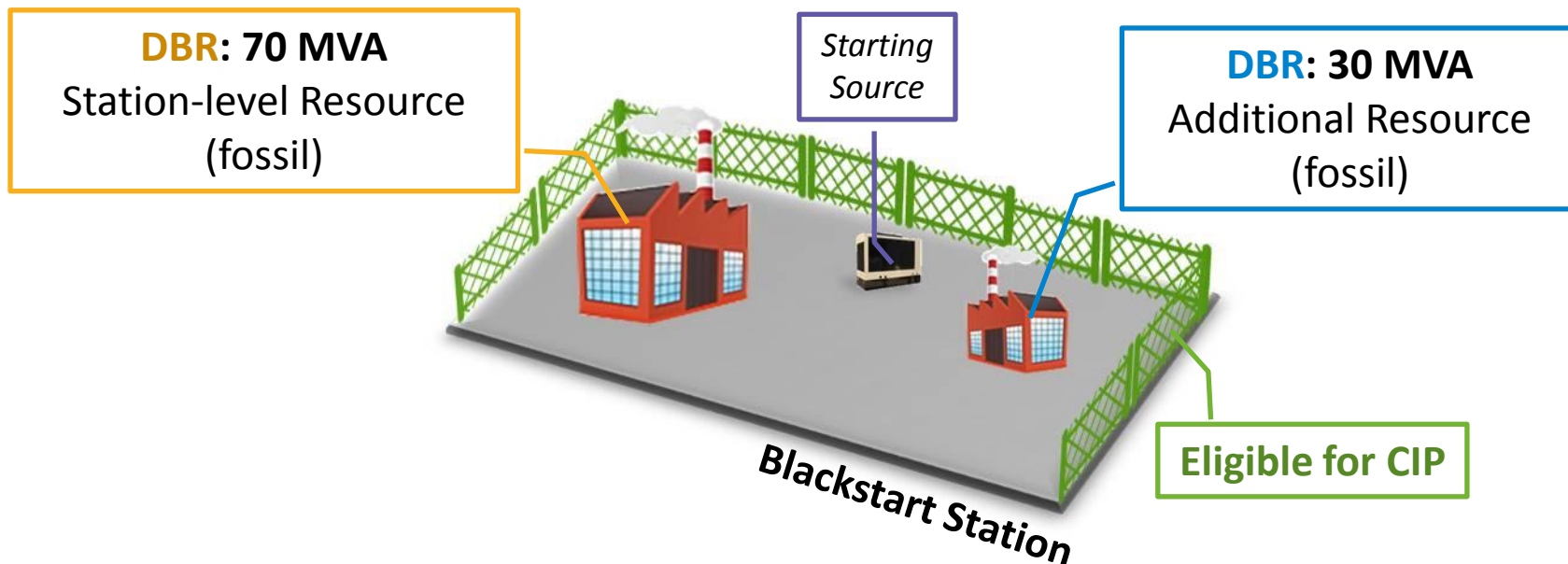
- Compensation to Blackstart Stations for the operation, maintenance and capital expenses associated with the provision of Blackstart Service from DBRs located at the Blackstart Station.
- Payment parameters contained within Appendix A to Schedule 16.
 - *2011 Table 1:* Blackstart O&M Payment
 - *2011 Table 2:* Blackstart Capital Payment
 - Standard Blackstart Capital Payment
 - Specified-Term Blackstart Capital Payment
 - *2011 Table 6:* CIP Payment

Blackstart Resources

Blackstart Station	One or more DBRs with the same starting source
Station-level Resource	Resource (fossil or hydro) with the largest station-level payment, as shown in Appendix A
Additional Resources	Remaining resources at the station
CIP Eligibility	DBRs that meet CIP eligibility requirements, payment as shown in Appendix A



Station Example



**Blackstart Standard
Rate Payment
(\$/year)**

=

Blackstart

O&M Payment

- **DBR**
- **DBR**
- **CIP O&M**

+

Blackstart

Capital Payment

- **DBR**
- **DBR**
- **CIP Capital**

**Blackstart Standard
Rate Payment
(\$/year)**

=

**Blackstart
O&M Payment**

+

**Blackstart Capital
Payment**

**2011 Table 1:
Blackstart O&M Payments**

Designated Blackstart Resource (DBR) Type	Station-level Blackstart O&M Payment \$/year for first DBR	Additional Resource Blackstart O&M Payment \$/year for each additional DBR
Fossil Resources:		
MVA ≤ 10	13,500	4,400
10 < MVA ≤ 60	39,100	5,400
60 < MVA ≤ 90	46,900	6,300
90 < MVA ≤ 300, Small Starting Requirement	99,400	17,200
90 < MVA ≤ 300, Medium		



Station-level DBR: 70 MVA

Additional DBR: 30 MVA

Station is Eligible for CIP

**Blackstart
O&M Payment**

=

Station-level

\$46,900

+

Additional

\$5,400

**Blackstart Standard
Rate Payment
(\$/year)**

=

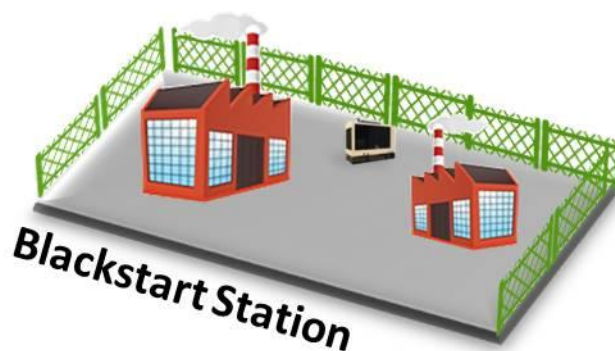
**Blackstart O&M
Payment**

+

**Blackstart
Capital Payment**

**2011 Table 2:
Standard Blackstart Capital Payments**

Designated Blackstart Resource (DBR) Type	Station-level Standard Blackstart Capital Payment \$/year for first DBR	Additional Resource Standard Blackstart Capital Payment \$/year for each additional DBR
Fossil Resources:		
MVA ≤ 10	16,000	8,000
10 < MVA ≤ 60	158,100	8,000
60 < MVA ≤ 90	183,100	8,000
90 < MVA ≤ 300, Small Starting Req.	305,700	8,000



Station-level DBR: 70 MVA

Additional DBR: 30 MVA

Station is Eligible for CIP

**Blackstart Capital
Payment**

=

Station-level

\$183,100

+

Additional

\$8,000

**Blackstart Standard
Rate Payment
(\$/year)**

=

**Blackstart
O&M Payment**

+

**Blackstart
Capital Payment**

2011 Table 6:

Blackstart CIP Payments and Costs

Designated Blackstart Resource (DBR) Type	Blackstart CIP O&M Payment (\$/year for the Blackstart Station)	Blackstart CIP Capital Payment (\$/year for the Blackstart Station)	Blackstart CIP Capital Cost (\$ for the Blackstart Station)
Fossil Resources:			
MVA ≤ 10	0	0	0
10 < MVA ≤ 60	155,900	276,100	1,291,800
60 < MVA ≤ 90	234,200	276,100	1,291,800
90 < MVA ≤ 300, Small Starting Req.	496,400	301,700	1,411,600



Station-level DBR: 70 MVA

Additional DBR: 30 MVA

Station is Eligible for CIP

**Blackstart CIP
Payments**

=

CIP O&M

CIP Capital

\$234,200 + \$276,100

DBR Payment Calculation

1 Calculate the total payment.

Total O&M Payment + Total Capital Payment	O&M Payment \$/year	Capital Payment \$/year
DBR (Station-level)	\$46,900	\$183,100
DBR (Additional)	\$5,400	\$8,000
Station CIP	\$234,200	\$276,100
Total	\$286,500	\$467,200

= \$753,700 / year

2 Divide into monthly payments.

= \$753,700 / 12 = \$62,808.33 / month

3 Multiply Blackstart Standard Rate Payment with MVA pro-rata share.

Station-level DBR

= \$62,808.33 × 70/100 = \$43,965.83

Additional DBR

= \$62,808.33 × 30/100 = \$18,842.50

Blackstart Station-specific Rate Payment



Values for a Blackstart Station-specific Rate Payment would come from FERC, not from Appendix A tables.

**Blackstart Station-specific
Rate Payment**

=

**Blackstart
O&M
Payment**

+

**Blackstart
Capital
Payment**

+

**Blackstart
CIP
Payments**

- Compensation to Blackstart Stations for the operation, maintenance and capital expenses associated with the provision of Blackstart Service from DBRs located at the Blackstart Station
- Calculation similar to Blackstart Standard Rate Payment, but values would not come from Appendix A tables
- Payment established when Commission accepts a Blackstart Owner's filing under Section 205 of the Federal Power Act

Infrequent Payments

Non-Designated Blackstart Resource Study Cost Payments

- Study to assess the viability of converting an offered resource to DBR at the direction of the ISO
- ISO issues final determination not accepting a resource as DBR
- Payment as depicted in Appendix A Table 7 (currently \$100,000) or Commission approved value

Infrequent Payments

Lump Sum Blackstart Payment

- Provides compensation for Category B DBRs that are retired or terminated
 - Minimum Period Open Term
 - Specified-Term
 - Station-specific payment as approved by the Commission
 - Station-level DBR must be retiring or terminated
- Present value of the remaining Capital payments left in the commitment
 - Blackstart Capital Payment
 - CIP Capital Payment
 - All resources at the station must be retiring or terminated.

Infrequent Payments



Equipment Damage Reimbursement

- Payment for equipment damage to a DBR:
 - during a system restoration.
 - when insurance was sought and not available.
 - if damage would not have occurred if the resource was not providing Blackstart Service.
- Commission approved value

"...damage to a Designated Blackstart Resource: (1) that resulted from operating such equipment in response to operating dispatch instructions from the ISO during the restoration of the New England Transmission System, (2) for which reasonably available and customary insurance was sought and not available for the damages incurred and (3) that would not have occurred but for the Blackstart Owner's provision of Blackstart Service from that Designated Blackstart Resource."



POLL ANSWERS

1. When are Blackstart changes effective?
 - a) 1/1/2012
 - b) 1/1/2013**
 - c) 1/1/2015
 - d) None of the above

2. Why are payments reduced?
 - a) Failure to Perform During a System Restoration
 - b) Failure to Maintain Blackstart Capability
 - c) Both a and b**

3. What are the infrequent payments? (Choose 3)
 - a) Blackstart Station-specific Rate Payment
 - b) Non-Designated Blackstart Resource Study Cost Payment**
 - c) Blackstart Standard Rate Payment
 - d) Lump Sum Blackstart Payment**
 - e) Equipment Damage Reimbursement**

Summary

Typical Monthly Blackstart Payments

- Blackstart Standard Rate Payment
- Blackstart Station-specific Rate Payment

Infrequent Blackstart Payments

- Non-Designated Blackstart Resource Study Cost Payments
- Lump Sum Blackstart Payment
- Equipment Damage Reimbursement

MONTHLY BLACKSTART SERVICE CHARGE



Monthly Blackstart Service Charge

- No change to the current charge structure.
- Transmission Customers shall pay a charge for Blackstart Service in a month.
 - Total Blackstart Service Payments
 - Regional Network Load pro-rata share

MARKET INFORMATION SYSTEM (MIS) REPORTS

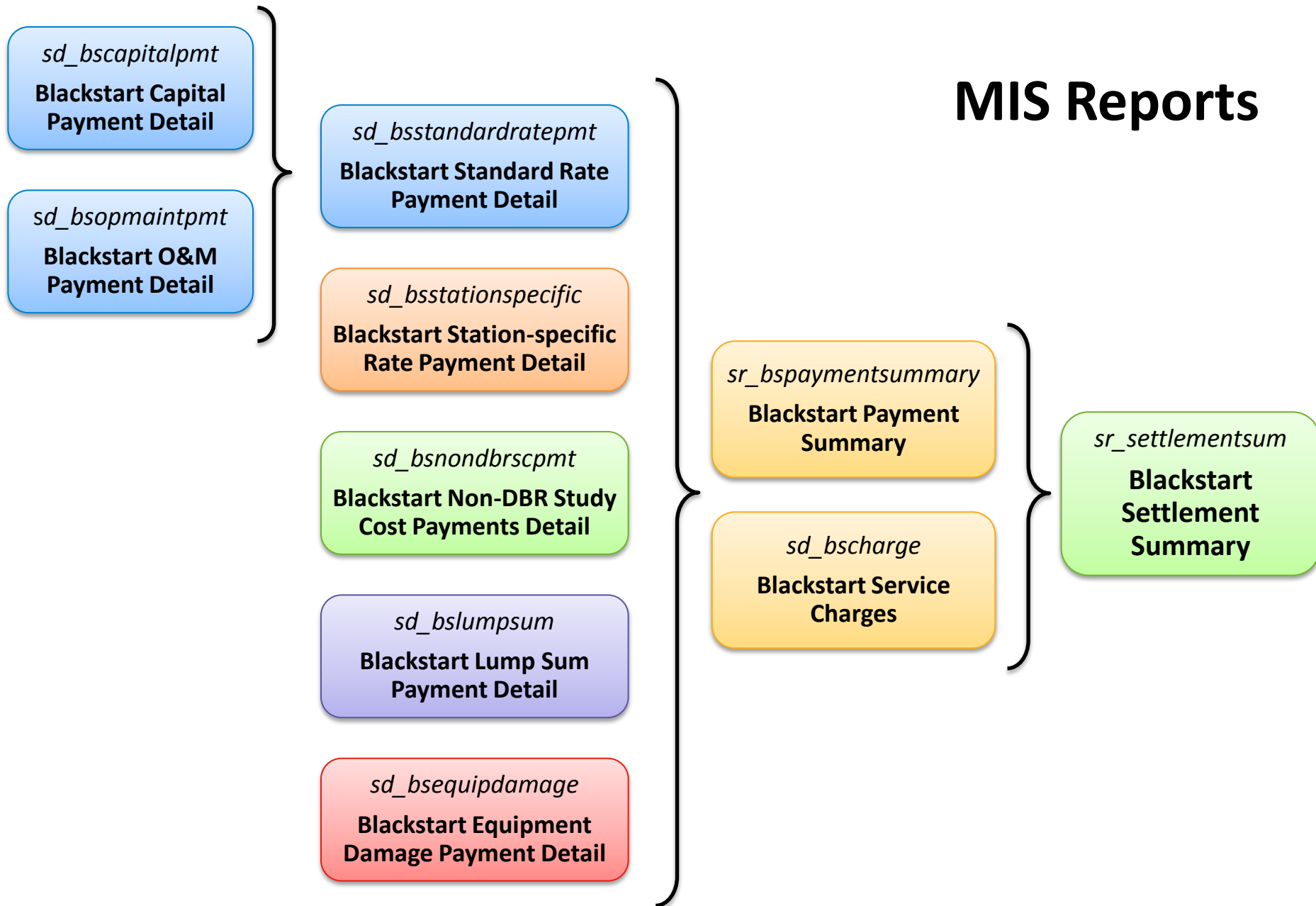
Blackstart Service

Where Can I Find Blackstart Service Settlement Information?

- MIS Reports are available via File Transfer Protocol (FTP) site
 - Secure site
 - Access required to view reports
 - Security Administrator (SA) assigns FTP access
- Reports are in Comma Separated Value (CSV) format



MIS Reports



Bill Line Item

ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841

Invoice / Remittance Advice

ATTN: Jay Company
New Corporation
Energy Industry
123 Corporate Drive

Anytown, MA 12345-1234

DOCUMENT NUMBER: 61282
DOCUMENT DATE: 07/07/2012
PAGE: 1 of 1
DUE DATE: 07/12/2012

CUSTOMER ID: 1

WIRE TRANSFER INSTRUCTIONS

FROM:
BANK:
ABA:
ACCOUNT:

TO:
BANK:
ABA:
ACCOUNT:

LINE	DESCRIPTION	BILLFROM/ BILL TO	DOCUMENT REF.	NET AMOUNT
47	OATT-Schedule 16 Black Start 0.000	06/01/2012 00:00 07/01/2012 00:00	Sample text	-260.00
48	OATT-Schd 16 Black Start CIF 0.000	06/01/2012 00:00 07/01/2012 00:00	Sample text	450.00

OLD WAY

Settlement months through 12/1/2012

ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841

Invoice / Remittance Advice

ATTN: Jay Company
New Corporation
Energy Industry
123 Corporate Drive

Anytown, MA 12345-1234

DOCUMENT NUMBER: 61282
DOCUMENT DATE: 02/07/2013
PAGE: 1 of 1
DUE DATE: 02/12/2013



CUSTOMER ID: 1

WIRE TRANSFER INSTRUCTIONS

FROM:
BANK:
ABA:
ACCOUNT:

TO:
BANK:
ABA:
ACCOUNT:

LINE	DESCRIPTION	BILLFROM/ BILL TO	DOCUMENT REF.	NET AMOUNT
49	OATT-Schedule 16 Blackstart 0.000	01/01/2013 00:00 02/01/2013 00:00	Sample text	-300.00

Settlement months starting 1/1/2013

Settlement Validation Tools Available Online

These tools can be accessed through ISO New England's website: www.iso-ne.com > Settlements > Billing Details



Resources

- [Open Access Transmission Tariff \(OATT\)*](#)
- [Operating Procedure 11*](#)
- [Blackstart Administration and Testing Changes Web Conference](#)
 - November 14, 2012
- [Blackstart Filing](#)

** These resources will be updated in 2013.*

Customer Support



- [Ask ISO](#)
 - Self-service interface for submitting inquiries
 - Accessible through the SMD Applications Homepage
 - Requires a valid digital certificate with the role of Ask ISO/External User
 - Contact your Security Administrator for assistance
- Phone: 413-540-4220
 - Monday through Friday, 7:30 A.M. to 5:30 P.M. Eastern Time
 - Recorded/monitored conversations
- Email: custserv@iso-ne.com
- Fax: 413-535-4156