Date of Request: February 5, 2010
Due Date: February 15, 2010

Request No. DPS-7(RAV-3)
NMPC Req. No. NM 7

NIAGARA MOHAWK POWER CORPORATION d/b/a National Grid

Case 10-E-0050 - Niagara Mohawk Power Corporation d/b/a National Grid
Electric Rates

Request for Information

FROM: Robert Visalli

TO: Revenue Requirements Panel

9/13/10
10-E-0050
207

Request:

A. Please provide an all-inclusive list of every electric revenue, expense and capital deferral / true-up the Company is seeking in this rate case. The list should include all existing deferrals / true-ups (e.g., SIR; pensions/OPEBs) as well as all newly proposed deferrals / true-ups (e.g., property taxes; energy efficiency). Split the list between existing and new deferral / true-up mechanisms.
B. For each such item, please provide the percentage deferral / true-up the Company is seeking (e.g., 100% true-up on property taxes, etc).
C. Please provide the Company's corresponding rate year projection of revenue / expense against which each actual revenue / expense will be measured for deferral / true-up purposes. Specify exactly where each revenue / expense projection appears in the Company's pre-filed exhibits (i.e., exhibit, schedule, page and line number).
D. Indicate the specific pre-filed direct testimony (witnesses and page / line numbers) wherein each requested deferral / true-up is explained.
E. Indicate which tariff leaves, if any, are applicable to each requested deferral / true-up.
F. To the extent the Company is seeking more deferrals / true-ups in this rate case than in Case 01-M-0075, fully explain why in light of the fact that this is a 3 year case compared to the 10 year Case 01-M-0075.
G. 1. Provide a breakdown of rate year revenues between those subject to proposed deferral / true-up and those not subject to proposed deferral / true-up (both $ and %'s).
Same as G.1 for rate year expenses.
Same as G.1 for all rate year rate base components.

Response:

A. See Pages 90 through 109 of the pre-filed testimony of The Revenue Requirements Panel for a listing and discussion of electric deferrals/true-ups.

Existing Deferrals/True-ups:

- Pension Expenses
- OPEB Expenses
- SIR Expenses
- Extraordinary Storm Costs
- Low Income Discount Allowance
- Economic Development Fund
- NYISO Tariff Schedule Costs – Schedule 1 and 2
- Generation Stranded Costs
- RPS Program Costs
- Exit Fees
- Aggregation Fees
- Voltage Migration Fees
- NYPA Residential Hydropower Benefit Reconciliation
- SBC Program Cost
- Transmission Revenue Adjustment Charge ("TRAC")

Newly Proposed Deferrals/True-ups:

- Incremental Costs Associated with Capital Expenditures
- Bad Debt
- Property Taxes
- Variable Pay
- Interest on Pollution Control Auction Debt
- Changes to Service Company Allocation Methodology
- Extraordinary Storm Costs (modified mechanism)
- Revenue Decoupling Mechanism ("RDM")
- Legacy Transition Charge Mechanism ("LTC")
- Electric Delivery Adjustment Mechanism ("EDAM")

Furthermore, the Company proposes to continue deferring the Revenue Requirement impacts of any Mandated Regulatory, Legislative or Accounting Changes or changes in industry standards ("Exogenous Event") that occur during the Rate Plan Period that individually have an annual impact of $5.0 million or greater.

B. The Company is seeking 100% deferral/true-up on all items. However, we are proposing a 10% over cap for the Cap-Ex tracker, variable pay is a downward only mechanism and other proposed reconciliation mechanisms provide for only limited recovery of amounts in excess of the rate allowance but full reconciliations for amounts below the rate allowance.

C. Please refer to Exhibit __ (RRP-8) Schedule 2 which shows the rate year projections of revenue/expense for Property Tax, Variable Pay, Low Income, Pension, OPEB, SIR and Economic Development Deferral accounts. This schedule references exhibits or testimony where projections can be found. Attachment 1 is provided with additional rate

year projections for Bad Debt, Storms, Interest on Pollution Control Debt, Changes to Service Company Allocation Methodology, and Transmission Revenue Adjustment Charge. The following deferrals are all handled outside of base rates - RPS Program Costs, SBC Program Costs and NYPA Residential Hydropower Benefit Reconciliation. New costs are not included in base rates for NYISO Tariff Costs-Schedule 1&2, Generation Stranded Costs, Exit Fees, Aggregation Fees and Voltage Migration Fees.

D. Please see the pre-filed testimony of The Revenue Requirements Panel, page 90, line 4, through page 109, line 9, for explanations of each true-up mechanism. Additional testimony on proposed deferrals can also be found as referenced below.

Low Income – Pre-filed Testimony of Rudolph L. Wynter, Jr.; page 25, line 4 through page 31, line 21.
Economic Development – Pre-filed Testimony of Rate Design, Customer and Markets Panel; page 118, line 7 through page 120, line 5.
SIR - Pre-filed testimony of the Infrastructure and Operations Panel; page 241, line 16 through page 242, line 2.
Incremental Capital Expenditures – Pre-filed testimony of the Infrastructure and Operations Panel; page 175, line 1 through page 177, line 16,.
Bad Debt – Pre-filed testimony of Rudolph L. Wynter, Jr.; page 50, line 1 through page 52, line 2.
Storm Costs - Pre-filed testimony of the Infrastructure and Operations Panel; page 232, line 5 through page 236, line 21.
Variable Pay - Pre-filed Testimony of Thomas B. King; page 34, line 1 through page 35, line 9.
Interest on Pollution Control - Pre-filed Testimony of Andrew E. Dinkel III.; page 3, lines 7-21 and page 22, lines 11-17.
Changes to Service Company Allocation - Pre-filed Testimony of Andrew F. Sloey; page 13, lines 1 through 15.
Electric Delivery Adjustment Mechanism – Pre-filed Testimony of Rate Design, Customer and Markets Panel; page 87, line 18 through page 88, line 20.
. Legacy Transition Charge Mechanism - Pre-filed Testimony of Rate Design, Customer and Markets Panel; page 89, lines 1 through line 18.
Revenue Decoupling Mechanism - Pre-filed Testimony of Rate Design, Customer and Markets Panel; page 103, line 11 through page 106, line 6.

E. Tariff Leaf 222 Merchant Function Change, 223 Transmission Revenue Adjustment, 263.2 Revenue Decoupling Mechanism ("RDM") and 263.3 Electric Delivery Adjustment Mechanism ("EDAM") are applicable to the proposed deferral/true-ups.

F. Niagara Mohawk has a number of deferral accounts and reconciliation mechanisms previously approved in the Merger Joint Proposal in Case 01-M-0075 or in various Commission orders. While the Company is asking for some new deferrals, we are also proposing to discontinue many of the existing deferrals. Certain proposed reconciliation mechanisms provide for only limited recovery of amounts in excess of the rate allowance but full reconciliations for amounts below the rate allowance.

- The Company is proposing to maintain current ratemaking treatment of SBC Program Costs, Energy Efficiency Expenses, RPS Expenses, 18-A Assessment Expenses, Commodity and GRT Expenses. These costs are direct pass-throughs and the Company has very little control over them.
- Deferral of recovery or refund amounts above or below current rate allowances for Pension, OPEB and SIR expenses is currently allowed.
- The Storm deferral was established in the MJP and further refined pursuant to the March 22, 2007 Stipulation of the Parties. The Company's request to establish a storm fund would provide a source of funds to respond to these significant events and provide better matching of cost recovery with cost incurrence.
- The Economic Development Program deferral has been in existence since 2003. Currently there is a base rate allowance of $12.5 million and we propose to maintain that level.
- Due to the turmoil in the auction rate bond market caused by the financial crisis, the Company proposes a reconciliation mechanism for the interest expense on auction rate debt. This true-up mechanism would be identical to what was approved by the Commission in Case 08-G-0609 for interest expense on the same variable rate debt that is allocated to the Company's gas operations.
- In the case of variable pay, the Company is not asking its customers to fund variable pay that is not actually paid to employees. If and to the extent that the variable pay is not paid out in any year, we would provide a credit to customers.
- The Commission has a policy of allowing reconciliation of property taxes above or below rate year levels. KEDNY, KEDLI and Consolidated Edison of New York ("Con Edison") have similar recovery. The Company has a very limited ability to control these expenses in light of current economic conditions, state budget cuts and significant increases in plant additions. The reconciliation mechanism protects customers if property taxes fall as a result of capital investment below the rate allowance or other, unanticipated events.
- The Company proposes a full reconciliation for recovery of incremental bad debt costs associated with commodity revenues. This true-up mechanism protects both the Company and its customers. This is true for purchased receivables as well.
- The Company proposes to track and reconcile the incremental revenue requirements effects associated with capital expenditures that differ from target levels, subject to a 10 percent cap for amounts over the target. The Commission has approved capital trackers in the past.

G. See Attachment 2 for a breakdown of rate year revenues, expenses and rate base components broken down by deferrable and non-deferrable.

Name of Respondent:
James Molloy and Peter Zschokke

Date of Reply:
February 15, 2010

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 1 to RAV-3
Sheet 1 of 1

Rate Allowanaces for Deferral Mechanisms not included in (RRP-8) Schedule 2
Electric Only
(000's)

Part C

Bad Debt				
Rate Year 1	December 31, 2011	RDCM-1; Schedule 4, line 93	$	19,104.0
Rate Year 2	December 31, 2012		$	-
Rate Year 3	December 31, 2013		$	-
Storm Costs				
Rate Year 1	December 31, 2011	Infrastructure & Operations Panel Testimony; Pages 234 lines 14 -20	$	6,000.0
Rate Year 2	December 31, 2012	Infrastructure & Operations Panel Testimony; Pages 234 lines 14 -20	$	6,000.0
Rate Year 3	December 31, 2013	Infrastructure & Operations Panel Testimony; Pages 234 lines 14 -20	$	6,000.0
Interest on Pollution Control Auction Debt				
Rate Year 1	December 31, 2011	Exhibit (AED-1); Schedule 1; Page 1 & Schedule 2 page 1	$	29,593.0
Rate Year 2	December 31, 2012	Exhibit (AED-1); Schedule 2; Page 2	$	44,878.0
Rate Year 3	December 31, 2013	Exhibit (AED-1); Schedule 2; Page 3	$	58,101.0
* before electric allocation factor				
Changes to Service Company Allocation Methodology				
Rate Year 1	December 31, 2011	Andrew F. Sloey Testimony; Pages 13 - 14	$	-
Rate Year 2	December 31, 2012	Andrew F. Sloey Testimony; Pages 13 - 14	$	-
Rate Year 3	December 31, 2013	Andrew F. Sloey Testimony; Pages 13 - 14	$	-
Transmission Revenue Adjustment Charge				
Rate Year 1	December 31, 2011	Design Cust & Markets Panel; line 1 through 12, page 87 of 131	$	132,128.8
Rate Year 2	December 31, 2012	Design Cust & Markets Panel; line 1 through 12, page 87 of 131	$	137,808.6
Rate Year 3	December 31, 2013	Design Cust & Markets Panel; line 1 through 12, page 87 of 131	$	143,282.7
Capital Investment Tracker				
Rate Year 1	December 31, 2011	Exhibit (RRP-8); Schedule 1; Sheet 1 of 8	$	7,376.0
Rate Year 2	December 31, 2012	Exhibit (RRP-8); Schedule 1; Sheet 1 of 8	$	12,942.0
Rate Year 3	December 31, 2013	Exhibit (RRP-8); Schedule 1; Sheet 1 of 8	$	19,656.0

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 2 to RAV-3
Sheet 1 of 2

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID
Electric Rate Case Presentation
Items Contributing to Needed Increase in Electric Base Rate Revenues
Rate Year Ending December 31, 2011
000's

Part G

		2011 Rate Case	Non-deferrable	Deferrable	
1	Net plant	4,743,434.4	4,182,257.0	561,177.4	Subject to deferral true-up through Cap Investment tracker
2	Other Reg assets	116,103.0	116,103.0		
3	Stranded Cost Reg assets	474,703.0	474,703.0		
4	ADFIT	(1,205,797.6)	(821,525.6)	(384,272.0)	Subject to deferral true-up through Cap Investment tracker
5	Working Capital	87,267.1	87,267.1		
6	Total	4,215,709.8	4,038,804.5	176,905.4	
7	EBCap Adjustment	(97,638.7)	(97,638.7)		
8	Rate Base	4,118,071.1	3,941,165.8	176,905.4	
9	Rate of Return (inc SIT & FIT)	11.597%	11.597%	11.597%	
10	Return on Rate Base	477,577.1	457,061.2	20,515.9	
11	Depreciation	197,521.2	178,798.0	18,723.2	Subject to deferral true-up through Cap Investment tracker
12	Property Taxes	141,781.0		141,781.0	Subject to deferral true-up through "EDAM"
13	Other Taxes	18,276.5	18,276.5		
14	Amort. Deferral Accounts	80,555.5	80,555.5		
15	Amort. Stranded Costs	164,804.5	164,804.5		
16	Rate Base Related	1,080,515.8	899,495.7	181,020.1	
17	Bad Debt	50,249.7	31,145.7	19,104.0	Subject to deferral true-up through Merchant Function Charge
18	Synergy Add Back	-	-		
19	Other Expense Related	849,015.5	597,893.3	251,122.2	Subject to deferral true-up through "EDAM"
20	Total Expense	899,265.2	629,039.0	270,226.2	
21	Revenue	(1,979,781.0)	(1,528,534.7)	(451,246.3)	
22	Deficiency	-			
23	SBC Expenses	45,057.7		45,057.7	
24	Energy Efficiency Expenses	49,603.2		49,603.2	
25	RPS Expenses	36,619.3		36,619.3	
26	18-a Assessment Expenses	82,000.0		82,000.0	
27	Commodity Expenses	992,057.2		992,057.2	
28	GRT Expenses	33,833.6		33,833.6	
29	Total Other Expenses	1,239,171.0	-	1,239,171.0	
30	SBC Revenues	(45,057.7)		(45,057.7)	
31	Energy Efficiency Revenues	(49,603.2)		(49,603.2)	
32	RPS Revenues	(36,619.3)		(36,619.3)	
33	18-a Assessment Revenues	(82,000.0)		(82,000.0)	
34	Commodity Revenues	(992,057.2)		(992,057.2)	
35	GRT Revenues	(33,833.6)		(33,833.6)	
36	Total Other Revenues	(1,239,171.0)		(1,239,171.0)	
37	Total Revenue Deficiency	-	-	-	
38	Total Base Costs	1,979,781.0	1,528,534.7	451,246.3	
39	Assessed Costs	1,239,171.0	-	1,239,171.0	
40	**Total Costs**	**3,218,952.0**	**1,528,534.7**	**1,690,417.3**	
		100%	**47.49%**	**52.51%**	
41	Total Base Revenues	(1,979,781.0)	(1,528,534.7)	(451,246.3)	
42	Assessed Revenues	(1,239,171.0)	-	(1,239,171.0)	
43	**Total Revenues**	**(3,218,952.0)**	**(1,528,534.7)**	**(1,690,417.3)**	
		100%	**47.49%**	**52.51%**	
44	Total Revenue Deficiency	-			

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 2 to RAV-3
Sheet 2 of 2

Total Deferrable Costs included in "Other Expenses"
000's

Pension	Rate Year 1	December 31, 2011	$	50,769.4
OPEB	Rate Year 1	December 31, 2011	$	108,946.3
Variable Pay	Rate Year 1	December 31, 2011	$	19,156.5
SIR	Rate Year 1	December 31, 2011	$	29,750.0
Economic Development	Rate Year 1	December 31, 2011	$	12,500.0
Storm Costs	Rate Year 1	December 31, 2011	$	30,000.0
		Total	$	251,122.2

Date of Request: April 5, 2010
Due Date: April 15, 2010

Request No. RAV-86
NMPC Req. No. NM 413 DPS-276

NIAGARA MOHAWK POWER CORPORATION d/b/a National Grid
Docket 10-E-0050 Niagara Mohawk Power Corporation
Rate Case

Request for Information

FROM: Robert Visalli

TO: Revenue Requirement Panel

Request:

Per Exhibit ___(RRP-6), Schedule 2, Sheets 4 and 8, the Company has included in rate year rate base $198,000 and in rate year regulatory asset expense amortizations $396,000 for the "deferred loss on the sale of the Oswego Fire School". However, in the 11/8/07 Commission Order in that case (07-M-0704), the Commission stated in part:

> Due to the unique nature of this transaction, National Grid proposes that shareholders assume the entire net book loss, amortized through December 2011, the remaining term of the Company's Merger Rate Plan, offset by retention of 100% of the annual avoided depreciation and operation and maintenance expenses, property taxes, and tax cash flow enhancement savings through the end of the Plan, $1,201,930.

The Commission went on to approve the Company's proposed ratemaking. In light of this Order, does the Company agree that ratepayers should not be held responsible for this deferred loss, and therefore the deferred loss should be removed from rate year rate base and rate year regulatory asset amortization expense? If not, explain in full.

Response:

The Company does agree that shareholders are responsible for the net book loss of the sale of the Oswego Fire School. The order also states that the loss is to be offset by the retention of 100% of the annual avoided depreciation and operation and maintenance expenses, property taxes, and tax cash flow enhancement savings of $1,201,930. See Attachment 1 for a calculation of the offsetting expenses and the amount to be assumed by shareholders. Therefore, the Company proposes to reduce rate year 2011 rate base and amortization. However, the Company will add back to O&M expense $285,202 for the avoided off-setting expenses which would have been given back to customers in rate year 2011. This correction will be included in the Company's Updates and Correction filing.

Name of Respondent:
James Molloy

Date of Reply:
April 12, 2010

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 1 to RAV-66
Sheet 1 of 1

	Loss on Sale of Building			Avoided Depr, O&M, Prop Tax, PT Cash flows			Assumed by Shareholders Net Loss		
	Electric 85%	Gas 15%	Total	Electric 85%	Gas 15%	Total	Electric 85%	Gas 15%	Total
Per Order	1,418,512.30	250,325.70	1,668,838.00	(1,021,640.50)	(180,289.50)	(1,201,930)	396,871.80	70,036.20	466,908.00
Reduced for delay in s	(32,536.06)	(5,741.66)	(38,277.72)	23,433.11	4,135.26	27,568.37	(9,102.95)	(1,606.40)	(10,709.35)
Beg Balance	1,385,976.24	244,584.04	1,630,560.28	(998,207.39)	(176,154.24)	(1,174,361.63)	387,768.85	68,429.80	456,198.65
July 08 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
August 08 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
September 08 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
October 08 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
November 08 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
December 08 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
January 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
February 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
March 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
April 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
May 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
June 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
July 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
August 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
September 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
	890,984.64	157,232.59	1,048,217.23	(641,704.75)	(113,242.01)	(754,946.76)	249,279.89	43,990.58	293,270.47
October 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
November 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
December 09 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
January 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
February 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
March 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
April 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
May 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
June 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
July 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
August 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
September 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
October 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
November 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
December 10 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
	395,993.04	69,881.14	465,874.18	(285,202.11)	(50,329.78)	(335,531.89)	110,790.93	19,551.36	130,342.29
January 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
February 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
March 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
April 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
May 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
June 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
July 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
August 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
September 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
October 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
November 11 Amort	(32,999.44)	(5,823.43)	(38,822.87)	23,766.84	4,194.15	27,960.99	(9,232.60)	(1,629.28)	(10,861.88)
December 11 Amort	(32,999.20)	(5,823.41)	(38,822.61)	23,766.84	4,194.15	27,960.99	(9,232.36)	(1,629.26)	(10,861.62)
	(0.00)	0.00	0.00	(0.00)	(0.00)	(0.00)	(0.00)	0.00	(0.00)

Date of Request: May 12, 2010
Due Date: May 24, 2010

Request No. RAV-137
NMPC Req. No. NM 807 DPS-529

NIAGARA MOHAWK POWER CORPORATION d/b/a National Grid
Docket 10-E-0050 Niagara Mohawk Power Corporation
Rate Case

Request for Information

FROM: Robert Visalli

TO: Revenue Requirement Panel

Request:

Regarding Exhibit ___(RRP-10), Schedule 2, Workpaper, 14 (Expense Type 400 – Other), numerous payments are made to vendors with the activity description "Community Relations" (activity # AG0010). Regarding this activity, please provide the following information:

1. Please provide the amount spent in the HTY on "Community Relations." Break each amount down by vendor.
2. Please provide the accounting manual description / explanation of activity AG0110.
3. Please provide a full explanation as to how "Community Relations" costs differ from "donations."
4. Please explain why these costs were not removed from the HTY "Other" cost component for the same reasons donations are removed (see Exhibit ___(RRP-10), Schedule 3, Sheet 1), as both Community Relations costs and donations are charitable contributions.
5. Please provide copies of the invoices for the 5 highest cost amounts in 1, above.

Response:

1. The vendor information is available on Sheets 11, 12 and 32 of Workpaper 14 to Exhibit ___(RRP-2), Schedule 7 (Pages 53, 54 and 74 of Book 16). These pages have been summarized in Attachment 1 to this response.

2. The Company assumes the question is referring to Activity AG0010 rather than Activity AG0110. The Company's accounting manual description of Activity AG0010 is Community Relations without further explanation. However, as a general rule, the Company uses this activity to account for activities that facilitate economic and community development in the Company's service territory and that encourage safe, efficient and economical use of the utility's service.

3. The Company views community relations different from donations as the community relations provide a direct benefit to the Company and customers through improved communications and economic development growth while donation are contributions to a non profit with no direct benefit to the Company.

4. Please see the response to part 3.

5. Please see Attachment 2 to this response.

Name of Respondent:
James Molloy

Date of Reply:
May 19, 2010

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 1 to RAV 137
Sheet 1 of 3

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Vendor Detail for Expense Type 400 Activity AG0010

Orig Business Unit	Vendor	Voucher Id	Billing Pool	Total Payables	T&D Allocated Payables
00036	ADIRONDACK BALLOON FESTIVAL	00556678		200.00	200.00
00036	ADIRONDACK NORTH COUNTRY ASSOC	00494768	00102	150.00	124.50
00036	ADIRONDACK REGIONAL CHAMBER OF COMMERCE	00483582		2,500.00	2,500.00
00036	ADIRONDACK REGIONAL CHAMBER OF COMMERCE	00530127		2,500.00	2,500.00
00036	ADIRONDACK SARATOGA CHAPTER	00536248		50.00	50.00
00036	ALBANY-COLONIE REGIONAL CHAMBER	00473736		6,558.00	6,558.00
00036	ALBANY-COLONIE REGIONAL CHAMBER	00538948		300.00	300.00
00036	ALZHEIMER'S ASSOCIATION - NENY	00536181		250.00	250.00
00036	AMERICAN HEART ASSOCIATION	00529628		400.00	400.00
00036	AMERICAN IMAGES	00549853		70.42	70.42
00036	AMHERST CHAMBER OF COMMERCE	00499674		400.00	400.00
00036	AMHERST CHAMBER OF COMMERCE	00505241		10,000.00	10,000.00
00036	ARCC FOUNDATION	00556677		165.00	165.00
00036	ASSOCIATION OF THE UNITED STATES ARMY	00507851	00102	150.00	124.50
00036	AVON CHAMBER OF COMMERCE	00498889		50.00	50.00
00036	BETHLEHEM CHAMBER OF COMMERCE	00500151		599.00	599.00
00036	BOYS & GIRLS CLUB OF SYRACUSE	00496485	00102	200.00	166.00
00036	BUFFALO NIAGARA PARTNERSHIP	00553835		33,000.00	33,000.00
00036	CANISIUS COLLEGE	00556178		1,000.00	1,000.00
00036	CAPITAL DISTRICT YMCA	00536304		375.00	375.00
00036	CENTER FOR ECONOMIC GROWTH	00515029	00102	5,000.00	4,150.00
00036	CHAMBER OF COMMERCE OF THE TONAWANDAS	00537030		1,108.00	1,108.00
00036	CHAMBER OF COMMERCE OF THE TONAWANDAS	00543347		525.00	525.00
00036	CHAMBER OF SCHENECTADY COUNTY	00471019		1,632.00	1,632.00
00036	CHAUTAUQUA COUNTY CHAMBER OF COMMERCE	00533758		382.00	382.00
00036	CHAUTAUQUA COUNTY CHAMBER OF COMMERCE	00551545		600.00	600.00
00036	CHEEKTOWAGA CHAMBER OF COMMERCE	00508403		495.00	495.00
00036	CITY OF GLENS FALLS	00541405		2,500.00	2,500.00
00036	CITY OF LACKAWANNA	00523715		2,000.00	2,000.00
00036	CLAYTON AREA CHAMBER OF COMMERCE	00533716		225.00	225.00
00036	CLEAR CHANNEL RADIO	00516724	00102	6,000.00	4,980.00
00036	CNY SALES & MARKETING EXECUTIVES	00557192	00102	170.00	141.10
00036	COHOES COMMUNITY CENTER INC	00530126		100.00	100.00
00036	COLLEGE OF SAINT ROSE	00520950		1,000.00	1,000.00
00036	COLUMBIA COUNTY CHAMBER OF COMMERCE	00492884		660.00	660.00
00036	CORPORATE VOLUNTEER COUNCIL	00538928	00102	50.00	41.50
00036	CORTLAND COUNTY CHAMBER OF COMMERCE	00490050	00102	464.00	385.12
00036	DIG SAFELY NEW YORK INC	00540175		750.00	750.00
00036	ELLICOTTVILLE CHAMBER OF COMMERCE	00501869		370.00	370.00
00036	ELLICOTTVILLE CHAMBER OF COMMERCE	00538624		1,200.00	1,200.00
00036	FAB OWNERS ASSOCIATION	00533622		2,800.00	2,800.00

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 1 to RAV 137
Sheet 2 of 3

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Vendor Detail for Expense Type 400 Activity AG0010

Orig Business Unit	Vendor	Voucher Id	Billing Pool	Total Payables	Allocated Payables
00036	FORT DRUM REGIONAL LIAISON ORGANIZATION	00507849	00102	150.00	124.50
00036	FULTON COUNTY REGIONAL CHAMBER	00500038		1,964.00	1,964.00
00036	GENESEE COUNTY CHAMBER OF COMMERCE	00494296		569.00	569.00
00036	GLENS FALLS ASSOC FOR THE HEARING	00545865		2,500.00	2,500.00
00036	GORE MTN REGION CHAMBER OF COMMERCE	00549831		215.00	215.00
00036	GREATER BUFFALO BOMA	00481236		580.00	580.00
00036	GREATER NIAGARA MANUFACTURER'S	00537904		300.00	300.00
00036	GREATER OGDENSBURG CHAMBER OF	00494771	00102	160.00	132.80
00036	GREATER ONEIDA CHAMBER OF COMMERCE	00501818		300.00	300.00
00036	GREATER OSWEGO-FULTON CHAMBER	00494321	00102	717.00	595.11
00036	GREATER SYRACUSE CHAMBER OF COMMERCE	00503417	00102	12,500.00	10,375.00
00036	GREATER WATERTOWN-NORTH COUNTRY CHAMBER	00507857	00102	1,172.00	972.76
00036	GRID IRON CAFE	00536183		73.60	73.60
00036	GUILDERLAND CHAMBER OF COMMERCE	00508404		450.00	450.00
00036	HERKIMER COUNTY CHAMBER OF COMMERCE	00533715	00102	250.00	207.50
00036	HOLIDAY VALLEY RESORT	00493168		358.90	358.90
00036	HOME BUILDERS ASSOCIATION OF CNY	00486117	00102	510.00	423.30
00036	INDUSTRIAL ASSET MANAGEMENT COUNCIL	00528429	00102	1,495.00	1,240.85
00036	INTERNATIONAL ECONOMIC DEVELOPMENT	00522418	00102	1,075.00	892.25
00036	JEFFERSON COUNTY JOB DEVELOPMENT CORP	00542209	00102	250.00	207.50
00036	JOSEPH MASCIOCCO	00526357		150.00	150.00
00036	JUVENILE DIABETES RESEARCH FOUNDATION	00539159		250.00	250.00
00036	LACKAWANNA AREA CHAMBER OF COMMERCE INC	00513782		300.00	300.00
00036	LAKE GEORGE REGIONAL CHAMBER	00555991		784.00	784.00
00036	LARAC (LOWER ADIRONDACK REGIONAL ARTS	00524195		650.00	650.00
00036	LEWIS COUNTY CHAMBER OF COMMERCE INC	00501827	00102	290.00	240.70
00036	LNRRCC	00473719		100.00	100.00
00036	LNRRCC	00515471		1,200.00	1,200.00
00036	LNRRCC	00556176		100.00	100.00
00036	LOWER NIAGARA RIVER CHAMBER OF COMMERCE	00532000		500.00	500.00
00036	MADISON COUNTY	00516090		300.00	300.00
00036	MALONE CHAMBER OF COMMERCE	00507855	00102	515.00	427.45
00036	MANUFACTURERS ASSOCIATION OF	00503433	00102	7,236.00	6,005.88
00036	MOHAWK VALLEY CHAMBER OF COMMERCE	00487767	00102	3,150.00	2,614.50
00036	MOHAWK VALLEY EDGE	00494734	00102	3,500.00	2,905.00
00036	MORNING STAR MISSIONARY BAPTIST CHURCH	00515552		100.00	100.00
00036	NEDA	00492605	00102	875.00	726.25
00036	NIAGARA AQUARIUM FOUNDATION	00501864		450.00	450.00
00036	NIAGARA USA CHAMBER	00505240		10,000.00	10,000.00
00036	NORTHEAST ENERGY EFFICIENCY	00530122		60.00	60.00
00036	ORLEANS COUNTY CHAMBER OF COMMERCE	00473320		182.48	182.48

Niagara Mohawk Power Corporation
d/b/a National Grid
Case 10-E-0050
Attachment 1 to RAV 137
Sheet 3 of 3

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Vendor Detail for Expense Type 400 Activity AG0010

Orig Business Unit	Vendor	Voucher Id	Billing Pool	Total Payables	Allocated Payables
00036	ORLEANS COUNTY CHAMBER OF COMMERCE	00523903		170.00	170.00
00036	ORLEANS COUNTY CHAMBER OF COMMERCE	00529737		365.00	365.00
00036	PHANTOMS HOCKEY LLC	00553225		2,240.00	2,240.00
00036	POTSDAM CHAMBER OF COMMERCE	00487768	00102	345.00	286.35
00036	RACE THE TRAIN	00520979		250.00	250.00
00036	RACE THE TRAIN	00533753		250.00	250.00
00036	RENSSELAER COUNTY REGIONAL CHAMBER	00505238		867.20	867.20
00036	RENSSELAER COUNTY REGIONAL CHAMBER	00534645		22.00	22.00
00036	ROME AREA CHAMBER OF COMMERCE	00539160	00102	3,442.00	2,856.86
00036	ROME INDUSTRIAL DEVELOPMENT CORP	00507854	00102	1,000.00	830.00
00036	SARATOGA SPRINGS DOWNTOWN BUSINESS	00526549		250.00	250.00
00036	SCHOHARIE COUNTY CHAMBER OF COMMERCE	00493102		206.00	206.00
00036	SEASONAL SPORTS SALES INC	00501829	00102	1,042.00	864.86
00036	SOUTHERN SARATOGA COUNTY CHAMBER OF	00516396		652.00	652.00
00036	SOUTH GLENS FALLS - TOWN OF MOREAU	00510600		40.00	40.00
00036	STATE OF NEW YORK	00548606		2,827.00	2,827.00
00036	ST LAWRENCE COUNTY CHAMBER	00507852	00102	445.00	369.35
00036	SYRACUSE HEATING & AIR CONDITIONING	00508402	00102	125.00	103.75
00036	THE CAPITAL CHAMBER FOUNDATION INC	00541929		1,850.00	1,850.00
00036	THE MATT BREWING COMPANY	00501824	00102	220.00	182.60
00036	THE SCHOOL DISTRICT FOUNDATION	00529603		100.00	100.00
00036	THE SOCIETY OF THE PLASTICS INDUSTRY INC	00497095	00102	1,200.00	996.00
00036	TRI-CITY VALLEY CATS	00527257		1,000.00	1,000.00
00036	TWIN RIVERS COUNCIL BSA	00525556		125.00	125.00
00036	TWIN RIVERS COUNCIL BSA	00530518		150.00	150.00
00036	UNITED WAY OF GREATER UTICA INC	00487764	00102	64.50	53.54
00036	UNITED WAY OF NIAGARA	00478324		170.00	170.00
00036	UNITED WAY OF NIAGARA	00507483		170.00	170.00
00036	UNITED WAY OF THE GREATER CAPITAL REGION	00526108		80.00	80.00
00036	UNIVERSITY OF ALBANY FOUNDATION	00549850		250.00	250.00
00036	UTILITY ECONOMIC DEVELOPMENT ASSOCIATION	00505505	00102	495.00	410.85
00036	WARREN COUNTY	00525528		99.00	99.00
00036	WARREN COUNTY ECONOMIC DEVELOPMENT CORP	00518525		1,000.00	1,000.00
00036	WARREN COUNTY ECONOMIC DEVELOPMENT CORP	00553242		135.00	135.00
00036	WARRENSBURG CHAMBER OF COMMERCE	00488077		80.00	80.00
00036	YO 'DREN MEMORIAL GOLF TOURNAMENT	00533779		100.00	100.00
00099	GE CORPORATE CARD SERVICES	00554673	00102	169.95	141.06
00099	KIOSK INFORMATION SYSTEMS	00660022	00101	8,454.00	8,454.00
00099	KIOSK INFORMATION SYSTEMS	00662560	00101	2,354.00	2,354.00
00099	VILLAGE MOTORS OF ORISKANY INC	00678967		2,900.00	2,900.00
Total Activity AG0010				178,935.05	169,656.88

nationalgrid **REQUEST FOR CHECK / ACH**

Date: 09/04/2009

PLEASE ISSUE PAYMENT AS FOLLOWS

Payable To (Name): Buffalo Niagara Partnership

Vendor No.: 2975

Federal Tax No. or SS#:

Address: 665 Main Street, Suite 200

RECEIVED
SEP 11 2009
ACCOUNTS PAYABLE

Paying Company Name and Number:

City, State Zip: Buffalo, NY 14203

Payment Due Date: 09/30/2009

In Payment of: 2009 Membership Dues, Marketing & Political Affairs

Invoice Number: 014093

08

Amount: $33,000.00

Business Unit*	Activity*	Work Order	Expense Type*	Orig Dept*	Charge Dept*	Bill Pool	Segment	Orig BU	Amount
00036	AG0010		400	81310	81310		DIST	00036	$33,000.00

Approver's Name (Print)	Signature	PeopleSoft User ID
Susan M. Crossett	Susan M. Crossett	crosses
Preparer's Name (Print)	**Signature**	**Phone Number**
Patty Acanfora	Patty Acanfora	(844) 7746

[ ] ACH [X] CHECK

Bank: _____
Routing #: _____
ACCT #: _____
Remit Email Address: _____

Check Stub Message: _____
(maximum limit of 70 characters)

Special Handling Instructions
Separate Check: Y N
Return Check To: Patty Acanfora
Energy Solutions Services
Kensington Avenue, Buffalo

Forward to :
Accounts Payable, C-1, Syracuse for Processing

nationalgrid **REQUEST FOR CHECK / ACH** Date 1/16/09

PLEASE ISSUE PAYMENT AS FOLLOWS

Payable To (Name)	Greater Syracuse Chamber of Commerce	Vendor No. 2569	Federal Tax No. or SS#
Address	572 S. Salina Street	Paying Company Name and Number Niagara Mohawk 00036	
City, State Zip	Syracuse, NY 13202	Payment Due Date 1/23/09 2/4/09	
In Payment of:	Annual Membership Dues for 2009	Invoice Number	
		Amount	
		$12,500.00	

Business Unit*	Activity*	Work Order	Expense Type*	Orig Dept*	Charge Dept*	Bill Pool	Segment	Orig BU	Amount
00036	AG0010	9930000237	400	81400	81400	00102			$6,250.00
00036	AG0010		400	81410	81410	00102			$6,250.00

Approver's Name (Print)	Signature	PeopleSoft User ID
Melanie Littlejohn		littlem
Preparer's Name (Print)	**Signature**	**Phone Number**
Anita Hogan	Anita Hogan	452-7681 (tie line 829)

☐ ACH ☑ Check

Bank
Routing #
ACCT #
Remit Email Address:

RECEIVED
JAN 29 2009
ACCOUNTS PAYABLE

Check Stub Message
(maximum limit of 70 characters)

Special Handling Instructions
Separate Check Y ☑ N ☐
Return Check To Anita Hogan
Energy Solutions Services
Beacon North #851

Forward to:
Accounts Payable, C-1, Syracuse for Processing

nationalgrid **REQUEST FOR CHECK / ACH**

Date: 02/09/2009

PLEASE ISSUE PAYMENT AS FOLLOWS

Payable To (Name): Amherst Chamber of Commerce

Vendor No.: 3082

Federal Tax No. or SS#:

Address: 350 Essjay Road, Suite 200

Paying Company Name and Number:

City, State Zip: Williamsville, NY 14221

Payment Due Date: 02/20/2009

In Payment of: 2009 Investors Dues

Invoice Number:

Amount: $10,000.00

Business Unit*	Activity*	Work Order	Expense Type*	Orig Dept*	Charge Dept*	Bill Pool	Segment	Orig BU	Amount
00036	AG0010		400	81310	81310		DIST	00036	$10,000.00

RECEIVED
FEB 10 2009
ACCOUNTS PAYABLE

Approver's Name (Print)	Signature	PeopleSoft User ID
Dennis W. Elsenbeck		elsenbd

Preparer's Name (Print)	Signature	Phone Number
Patty Acanfora	Patty Acanfora	(844) 7746

[ ] ACH

[X] CHECK

Bank _____

Routing # _____

ACCT # _____

Remit Email Address: _____

Check Stub Message _____

(maximum limit of 70 characters)

Special Handling Instructions

Separate Check Y N

Return Check To: Patty Acanfora
Energy Solutions Services
Kensington Ave., Buffalo

Forward to :
Accounts Payable, C-1, Syracuse for Processing

nationalgrid **REQUEST FOR CHECK / ACH**

Date: 02/09/2009

PLEASE ISSUE PAYMENT AS FOLLOWS

Payable To (Name): Niagara USA Chamber

Vendor No.: 4043

Federal Tax No. or SS#:

Address: Vantage Center
6311 Inducon Corporate Drive

Paying Company Name and Number:

City, State Zip: Sanborn, NY 14132

Payment Due Date: 02/20/2009

In Payment of: 2009 Business Seminars

Invoice Number:

Amount: $10,000.00

Business Unit*	Activity*	Work Order	Expense Type*	Orig Dept*	Charge Dept*	Bill Pool	Segment	Orig BU	Amount
00036	AG0010		400	81310	81310		DIST	00036	$10,000.00

RECEIVED
FEB 10 2009
ACCOUNTS PAYABLE

Approver's Name (Print): Dennis E. Elsenbeck

Signature:

PeopleSoft User ID: elsenbd

Preparer's Name (Print): Patty Acanfora

Signature: Patty Acanfora

Phone Number: (844) 7746

[ ] ACH

Bank: _____
Routing #: _____
ACCT #: _____
Remit Email Address: _____

[X] CHECK

Check Stub Message: _____
(maximum limit of 70 characters)

Special Handling Instructions
Separate Check: Y N
Return Check To: Patty Acanfora
Energy Solutions Services
Kensington Ave., Buffalo

Forward to :
Accounts Payable, C-1, Syracuse for Processing

Page: 1

DEPOSIT INVOICE

Kiosk Information Systems, Inc.
346 S. Arthur Avenue
Louisville, CO 80027
(303) 466-5471

Invoice Number: 0010049
Invoice Date: 8/7/2009
Order Date: 8/7/2009

Customer Number: NAT GRI

Sold To:
National Grid
40 Sylvan Rd
Waltham, MA 02451
Confirm To:

Ship To:
National Grid
40 Sylvan Rd
Waltham, MA 02451

Customer P.O.	Ship VIA	F.O.B.	Terms
	BESTWAY		50% Dep/Bal Prior to Shipment

Item Number	Unit	Ordered	Price	Amount
K10049	EACH	2.00	3,274.00	6,548.00
Qty 2 - Stealth - NatGrid - EA				
*SOFTWARE	EACH	1.00	9,500.00	9,500.00

Net Order:	16,048.00
Less Discount:	0.00
Freight:	860.00
Sales Tax:	0.00
Order Total:	16,908.00
DEPOSIT DUE	[illegible]

PAYMENT OF DEPOSIT IS REQUIRED PRIOR TO START OF PRODUCTION
PAYABLE IS US DOLLARS

PLEASE REMIT TO: **KIOSK INFORMATION SYSTEMS, INC.**
346 S. Arthur Avenue
Louisville, CO 80027

RECEIVED
AUG 07 2009
ACCOUNTS PAYABLE

PO - 103239
Scan to: Thomas Faron

Date of Request: March 31, 2010
Due Date: April 12, 2010

Request No. DKS-11
NMPC Req. No. NM 381 DPS 250

NIAGARA MOHAWK POWER CORPORATION d/b/a National Grid

Case 10-E-0050 - Niagara Mohawk Power Corporation d/b/a National Grid
Electric Rates

Request for Information

FROM: David Shahbazian

TO: Revenue Requirement Panel

Request

1. Exhibit IOP-6, sheets 1 & 2, lists projects associated with Capital Software and Other Information Systems Rent Expense. For each project listed below, please provide the following information:

   a) Amortization schedule, including the date, and original amount capitalized.
   b) The amount of risk premium in the RY1, RY2 and RY3 projections.
   c) Project description with the associated cost/ benefit analysis (this request has been already met for the last four software projects listed in Company's response to DKS-4, question 4, part a, and question 6).

   Exhibit IOP-6 Capital Software and Other Information System Projects:
   INVP 0314 U.S. Intranet Consolidation
   INVP 2210 Intranet Design
   INVP 1092 OneNet (Common User Interface)
   INVP 1393 Desktop Refresh
   INVP 1389 Unix Lifecycling
   INVP 1656 Customer Systems Agent Desktop
   INVP 1306 IVR Phase 2 – (Interactive Voice Response)
   INVP 1242 Transformation KPI's
   INVP 1088 Datacenter Rationalization for 2011, 2012, 2013

2. Please explain the Company's capitalization policy; include all formal Company procedures.

3. For each of the new programs identified in Exhibit IOP-6 (e.g., Datacenter Rationalization, US Intranet Consolidation, etc), please provide the following:

   a) The actual and estimated expenditures by year broken down by cost component;

   b) The number of years over which the project's costs are proposed to be amortized as well as the basis for this proposal.

c) Company's accounting and ratemaking rationale for capitalizing the program costs. Include relevant references from the FERC Uniform System of Accounts. Include relevant references to the ratemaking afforded such costs in the 2007 MJP

Response:

1.

a. For an amortization schedule for the projects in Exhibit IOP-6, please refer to Exhibit (RRP-10), Workpapers to Exhibit RRP-2, Schedule 8, Workpapers 11 through 13.

b. For the amount of risk premium in the RY1, RY2 and RY3 projections for the projects in Exhibit IOP-6, please refer to Exhibit (RRP-10), Workpapers to Exhibit RRP-2, Schedule 8, Workpapers 11 through 13.

c. The project description with the associated cost/benefit analysis for all listed projects has been provided in the response to DKS-4, question 2, part a, with the exception of INVP 1389 Unix Lifecycling which may be found in Attachment A.

2. For the Company's capitalization policy for software, please see Attachment B.

3.

a. The estimated expenditures, by year broken down by cost component, for each of the new programs identified in Exhibit IOP-6 may be found in the Investment Summary papers provided either as an attachment to this IR or as an attachment previously provided in the response to DKS 4. Please refer to the table below for the response reference. Each entry in the table corresponds to each of the entries in Exhibit IOP-6 (excluding those new projects with a material value less than $50K).

Category	INVP	Investment Name	Response Reference
Customer	1656	Customer Systems Agent Desktop	see Attachment B2 to DKS 4
Service	1306	IVR Phase 2 - (Interactive Voice Response)	see Attachment B2 to DKS 4 and DKS 4 6a response
	2204	Contact Center Operational Efficiencies	see Attachment B2 to DKS 4
	2202	Customer Self Service via IVR - Customer Experience	see Attachment C1 to DKS 11
	2200	Customer Self Service via Web - Customer Experience	see Attachment B2 to DKS 4
	2201	Customer Self Service via Web - Operational Improvements	see Attachment B2 to DKS 4
	980	Increase Customer Self Service activity on the Web	see Attachment B2 to DKS 4
	1159	Customer Insights and Analytics	see Attachment B2 to DKS 4
	2203	Customer Self Service via IVR - Operational Improvements	see Attachment C1 to DKS 11
	1660	Legacy Grid Web Self Service SW Upgrade	see Attachment C1 to DKS 11
	2205	Contact Center Business Continuity	see Attachment C1 to DKS 11
	1255	Contact Centers Call Recording Replacement	see Attachment C1 to DKS 11
	1356	Internet Strategy Implementation	see Attachment B2 to DKS 4
	1643	Regulatory Placeholder - Customer Systems	see DKS-4 3a response
	1549	Non-Interval Collections Sys Consolidation (ITRON/PP4/MVRS)	see Attachment C1 to DKS 11
	1232	Settlement Solution	see Attachment C1 to DKS 11
	937	Purchase of Receivables NY	see Attachment C1 to DKS 11
	1235	Account Initiation - Collections Data Hygiene Initiatives - Ph 2&3	see Attachment C1 to DKS 11

Operations	1185	Distribution/Outage Management System	see Attachment B2 to DKS 4
	2155	Mobile - Electric Distribution Legacy Grid Mobile Expansion	see Attachment B2 to DKS 4
	1642	Radio Console Standardization	see Attachment B2 to DKS 4
	1242	Transformation KPIs	see Attachment B2 to DKS 4
	2195	DECUS13 - URD Optimization Tool - Underground Residential Dist.	see Attachment B2 to DKS 4
	953	Smallworld GIS Upgrade	see Attachment B2 to DKS 4
	1363	Substation Equipment Analysis	see Attachment B2 to DKS 4
	1482	ACIS Target Pricing Model (Automated Contractor Invoicing Sys)	see Attachment C1 to DKS 11
	1484	Cascade Phase II (Substation Equipment Maintenance)	see Attachment C1 to DKS 11
	2182	DECUS02 - Mobile Devices for Field Investigation	see Attachment C1 to DKS 11
	2171	Exchange of Notice - Joint Pole - Double Pole	see Attachment C1 to DKS 11
	2162	Primavera - Project Management Extensions	see Attachment C1 to DKS 11
	1485	Computapole Upgrade	see Attachment C1 to DKS 11
	2172	IDS Reliability Reporting & Analysis (Interruption & Disturbance Sys)	see Attachment C1 to DKS 11
	1488	Remote Access to Fault Recorders	see Attachment C1 to DKS 11
	2165	SEAL Upgrade (Storm Emergency Assignment List)	see Attachment C1 to DKS 11
	845	DataStage Upgrade Capacity Planning	see Attachment C1 to DKS 11
	1573	Transmission Investment Mgmt System (TIMS)	see Attachment B2 to DKS 4
	1227	NERC CIP Compliance (2010-2013)	see Attachment B2 to DKS 4
	2277	NERC-CIP Service Mgmt Toolset/NERC-CIP End-to-End Solution/ITIL Compliance	see Attachment B2 to DKS 4
	2483	Integrated Project & Portfolio Planning	see Attachment B2 to DKS 4
	2270	Transmission Customer System Upgrade	see Attachment C1 to DKS 11
	1224	TOA Enhancements (Transmission Outage Application)	see Attachment C1 to DKS 11
	2276	NY EMS Remote Access Enhancement (Citrix)	see Attachment C1 to DKS 11
Shared Services	314	US Intranet Consolidation	see Attachment B2 to DKS 4
	2210	Intranet Design	see Attachment B2 to DKS 4
	1671	US Transaction Delivery Center	see Attachment C1 to DKS 11
	2391	Regulatory Cost Structure - UI (Utilities International) Planner	see Attachment C1 to DKS 11
	1367	Group Finance FC - Hyperion Upgrade Replacement	see Attachment C1 to DKS 11
		US SAP ERP Back Office	see Attachment B2 to DKS 4
Shared Infrastructure	1088	Datacenter Rationalization (includes specific storage computing & telecoms)	see Attachment B2 to DKS 4
	1129	Employee Remote Access Program/Workplace Enhancements	see Attachment B2 to DKS 4
	1134	Enterprise Content Management and Data Archival Program	see Attachment B2 to DKS 4
	1648	Network Strategy	see Attachment B2 to DKS 4
	1092	OneNet (common user interface)	see Attachment B2 to DKS 4
	1393	Desktop Refresh	see Attachment B2 to DKS 4
	1395	System Mgmt Toolset (includes CMDB Standardization & Commoditization)	see Attachment C1 to DKS 11
	1389	Unix Lifecycling	see Attachment A to DKS 11
	823	Security Enhancement Projects 2011	see response below
	1391	Wintel Lifecycling	see Attachment C1 to DKS 11
	1401	LAN/WAN	see Attachment C1 to DKS 11
	1400	Video Conferencing	see Attachment C1 to DKS 11
	1135	IS Audit Remediations	see response below

The allocations for INVP 823 Security Enhancement Projects and INVP 1135 IS Audit Remediations are reserves put in place to allow for any unforeseen work that may be necessary in the future.

The actual expenditures by year, broken down by cost component, may be found in Attachment C2.

b. All capitalized software projects are amortized over 60 months (5 years). The regular improvements and upgrades in technology and functionality of software means that within 5 years software has usually been superseded and will be unsupported by the vendor, requiring an upgraded version to be purchased. As well as this, upgrades to hardware infrastructure may mean that current software is no longer compatible with the new platform.

c. The rationale for capitalizing these program costs is that they produce an identifiable intangible asset that will create future economic benefit for the Company. Page 24 of the 2007 Keyspan/Grid MJP states, "This synergy savings amount excludes executive benefits, capitalized information technology costs, and the costs to achieve associated with efficiency gains". Please also refer to the enclosed document '2007 MJP Appendix 6' at Attachment D.

Name of Respondent:
Avron Segal
Wayne Watkins

Date of Reply:
April 23, 2010

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CAPEX IS Investment Proposal – Summary
US UNIX Server Consolidation
IS-CTO, Shared, Project Number-K134CS

A project sanction paper by Steven Trezza on behalf of Chris Murphy, 2nd Sept, 2008

Description

Over 350 partitions on 250 Physical UNIX Server infrastructures support various business applications/systems at National Grid US. These servers have a maintenance warranty extended year-on-year. By the end of this financial year approximately 43 physical UNIX servers hosting 50 partitions (**18%** of the UNIX estate) would be reaching or have reached End of Life (aged over 48 months) posing a potential risk to the stability of the applications/systems supporting the business processes due to non-availability of vendor support.

Recent advancement in the consolidation technologies (partitioning - LPAR[1]) and increase in processing power (75 times more powerful in the last 8 years) have enabled to have fewer systems support business without loss of functionality or performance. National Grid IS has developed strategy and design (leveraging on these technological advancements) to move towards consolidation/virtualisation during the life cycling process to benefit from reduced server foot prints and lowered TCO.

Adoption of this consolidation strategic approach will reduce the refresh costs by **30%** (as against the traditional like for like replacement – estimated at $3m for refresh of 43 servers) and reduce the overall server foot print by **90%** (5 physical servers in lieu of 43, resulting in **$94k** savings associated with data centre usage[2]) reducing the overall TCO, future refresh costs and provides improved service (ability to dynamically scale up the resources allows quicker response times to implement projects and resources)

This paper seeks sanction of **$1867k** (inclusive of $94k risk margin) for the delivery[3] of refresh of the aged Unix Servers (43 Physical servers) inline the agreed strategic approach based on partitioning and consolidation. The scope of this project will be to:

- Engage the vendor (IBM) for timely provisioning of the server infrastructure
- Stakeholder (application owners/Business) communication and management for approvals for outages/replacements
- Installation and commissioning of the new IBM infrastructure
- Migration of the application to the new partitioned environment
- Decommissioning of the aged/replaced UNIX infrastructure (43 Physical Servers)

The project will be delivered using the Solution Delivery Process model and this refresh cycle is expected to be completed by 10th Apr 09 (24th Apr 09 with two weeks contingency period).

Category: Policy-driven

Risk score: **36**

Primary Drivers: Policy, Risk mitigation

Project Classification: Medium

Region: US

Finance	
Sanction Cost	**$1867k (towards delivery phase)**
Project included in approved Business Plan?	INVP1389 ($2000k budgeted)

[1] LPAR – Logical Partition provides the ability to stack multiple instances of the environment or Operating System on a single hardware.
[2] The price for hosting 1 full rack (48U – 78in H X 34in D X 19in W) is $1300/pcm. Refer Benefits section 9.3 on page 8 for detailed calculation
[3] The design and architecture will be inline with the design/architectural specifications developed for server asset refresh.

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Project cost relative to approved Business Plan 95%

Cost apportioning will be as follows: 50% to National Grid US and 50% to Keyspan. Server profile matrix for cost apportioning will be used when available to allocate the costs to the respective lines of business within National Grid US and Keyspan.

Resources	
Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	Neutral

Key issues

- Approximately 43 UNIX Infrastructure will reach end of life by end of the financial year and will no longer be supported by the vendor
- Alignment with server consolidation activities
- Continued reliance on unsupported systems a potential risk to the stability of the applications/systems that support business processes

Key milestones

- PRM/GTG submission – 22nd Aug 08
- GTG approval – 29th Aug 08
- PRM endorsement – 2nd Sept 08
- GISSC approval – week starting 8th Sept 08
- Paper signed by the project sponsor – 17th Sept 08
- Project start date – 22nd Sept 08
- Purchase Order to the vendor/s – 22nd Sept 08
- Hardware delivery – 10th Oct 08
- Project end date – 10th Apr 09
- Project contingency end date – 24th Apr 09

Climate change	
Contribution to National Grid's 2050 80% emissions reduction target:	90% reduction in server footprint
Impact on adaptability of network for future climate change:	Positive
Are financial incentives (e.g. carbon credits) available?	No

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of **$1867k** (including risk margin of $94k) by 2nd Sept 08

(b) NOTE that Chris Murphy, Vice President Enterprise Operations Global IS, is the Project Sponsor

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(c)	NOTE that Joanne Engle is the Project Manager and has the approved financial delegation to deliver the project

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Brian Kelly, Department Head, IS Services & Operations, Global IS

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

John Reichelt, Chief Information Officer, Global IS

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CAPEX IS Investment Proposal – Summary
US UNIX Server Consolidation
IS-CTO, Shared, Project Number-K134CS

A project sanction paper by Steven Trezza on behalf of Chris Murphy, 2nd Sept 2008

1. Background

National Grid has implemented various business applications and essential infrastructure services to support its business operations. These implementations have grown organically over a period of time and the dependency on IT has become obvious for smooth business operations. Hence the availability of the IT systems and associated business services becomes imperative in maintaining the reputation within the utility industry.

National Grid IS has developed consolidation strategies and policies surrounding the refresh of these infrastructures supporting the business. In the US policy is to refresh the assets every 4 years while in the UK it's every 5 years. This ensures that the infrastructures continue to have vendor support and avoid any risk to the business due to non-availability of support which may impact the availability of the business applications hosted on these infrastructures. In addition aged assets attract premium (additional support costs) to maintain.

Recent technological consolidation developments have resulted in more powerful and capable systems being available in the market and the technologies supporting consolidation through virtualisation and partitioning has paved way to have fewer systems to support applications with no impact to the performance. National Grid IS have developed strategies aimed to exploit virtualisation/partitioning as often as possible by stacking multiple instances on a single hardware. National Grid intends to align the refresh initiatives with the strategic approach which will enable reduction of server footprint there by the overall TCO.

This paper intends to perform consolidation/refresh of the UNIX servers which would reach End of Life this financial year and consolidate where possible. From the inventory it is known that 43 physical UNIX Servers hosting 50 partitions will reach end of life this financial year and the intention is to consolidate these 50 instances on to 5 Physical devices using partitioning (LPAR) technology.

At the end of this project, 16% reduction in the server footprint will be achieved. This strategic approach is 30% economical as compared to the traditional like for like replacement (estimated at $2.7 m) and also aligns with the organisations wish to reduce the carbon footprint. Also reduced server footprint will benefit from indirect savings associated with the use of Data centre facilities such as power, air conditioning, network port etc. (Refer the benefits section for details)

This paper seeks approval for an investment of $1867k (inclusive of $94k risk margin) for the delivery of refresh of the aged Unix Servers. The scope of this project will be to:

- Engage the vendor (IBM) for timely provisioning of the server infrastructure
- Stakeholder (application owners/Business) communication and management for approvals for outages/replacements
- Installation and commissioning of the new IBM infrastructure
- Migration of the application to the new partitioned environment
- Decommissioning of the aged/replaced UNIX infrastructure

The project will be delivered using the Solution Delivery Process model and this refresh cycle is expected to be completed by 10th Apr 09 (24th Apr 09 with two weeks contingency period).

2. Investment Drivers and Business Issues

- Approximately 43 UNIX Infrastructure will reach or have reached end of life by end of the financial year and will no longer be supported by the vendor
- Alignment with server consolidation activities

- Continued reliance on unsupported systems a potential risk to the stability of the applications/systems that support business processes

- Reduced carbon foot print through consolidation and virtualisation, supporting the company direction on environmental conservation and reduced pressure on data centre facilities (cooling, power etc)

- Supports Data centre rationalisation and consolidation initiatives

3. Assumptions

- There will be no change to the application functionality and the procedures for managing the applications
- There would be no additional costs associated with the application migration/upgrade and would be carried out by the existing operations teams
- There will be no change to the application functionality and the procedures for managing the applications
- The IS operations team involved (UNIX) in the project will be able to dedicate 60% of the time for life cycle activities
- The vendor delivery timescales for the hardware is 15 working days

4. Project Description

The objective of this project is to refresh the aged UNIX infrastructure and in the process reduce the overall server footprint (by 90%) and reduce the overall TCO by means of consolidation.

Solution delivery process model will be adopted for the delivery of this project. The project will align with the IS refresh strategy which aims at use of virtualisation and consolidation technologies/procedures

The activities involved in the delivery phase are:

- Engaging the vendor for timely provisioning of the UNIX Infrastructure (estimated purchase is 6 physical servers – IBM P550 with P6 processor)
- Stakeholder communication and engagement for timely approval of the outages/refresh
- Engaging the application owners/users for light touch testing activities
- Installation and commissioning of the new IBM infrastructure (inline with the standard build procedures)
- Development of a migration plan and timescales
- Migration of the application from physical UNIX servers to the partitioned environments (from 60 physical servers to 6 physical servers)

The project is expected to be completed by 10th Apr 09.

5. Options Analysis

Option	Recommendation	Rationale
Do Nothing:	Not Recommended	This option is not recommended as it would not be inline with the National Grid refresh policy. Failure to refresh will result in continued reliance on unsupported hardware and

Option	Recommendation	Rationale
		pose risk to the stability of the application/business system.
Defer project:	Not Recommended	This option is not recommended due to the same reasons as mentioned for 'Do nothing' option.
Refresh by adopting a like for like replacement approach	Not Recommended	This option is not recommended as the cost for like for like replacement would be significantly higher (45%) than the alternate strategy adopted (virtualisation and consolidation). Also this strategy will not support the company direction on environmental conservation and presents additional costs to the data centres facilities
Refresh by adopting a strategy that's based on virtualisation and consolidation	Recommended	"This option is recommended as the cost would be 60% less as compared to like for like replacement (estimated at $3m) and also reduces the overall TCO and future refresh costs. This approach supports the organisation initiatives to reduce the overall carbon footprint.

6. Milestones

Key Milestones	Date	Responsible person...
PRM / GTG submission	22nd Aug 08	Joanne Engle – National Grid IS Project Manager
GTG approval	29th Aug 08	Joanne Engle – National Grid IS Project Manager
PRM endorsement	2nd Sept 08	Joanne Engle – National Grid IS Project Manager
GISSC approval	w/c 8th Sept 08	Joanne Engle – National Grid IS Project Manager
Paper signed by Project Sponsor	17th Sept 08	Joanne Engle – National Grid IS Project Manager
Project Start date	22nd Sept 08	Joanne Engle – National Grid IS Project Manager
Purchase Order to the Vendor	22nd Sept 08	Joanne Engle – National Grid IS Project Manager
Hardware delivered	17th Oct 08	Joanne Engle – National Grid IS Project Manager
Project End date	10th April 09	Joanne Engle – National Grid IS Project Manager
Contingency End date	24th April 09	Joanne Engle – National Grid IS Project Manager

7. Safety, Environmental and Planning Issues

There are no issues identified

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8. Investment Recovery

8.1 Investment Classification

This investment proposal is policy driven and addresses the refresh of aged assets (aged over 4+ years). This investment will mitigate the risk of reliance by the business on unsupported hardware/infrastructure.

8.2 Regulatory Implications

This project does not have direct implication on the regulatory requirements but may have indirect impacts associated with the availability of the in-scope systems

8.3 Customer Impact

There will be very minimal impact to the customer (associated with non-availability of the system during outages/refresh/migration). However it is expected that the performance of the systems will improve on account of moving towards more capable and powerful infrastructure.

9. Financial Impact

9.1 Cost Summary

The following table provides the full costs for the delivery of the project. A detailed breakdown is provided in Appendix B.

$k		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX								
	CAPEX	1867					1867		
IS Investment Plan (INVP1389)	OPEX								
	CAPEX	2000					2000		
Variance to plan	OPEX								
	CAPEX	133							

Cost apportioning will be as illustrated below:

50% to National Grid US and 50% to Keyspan. Server profile matrix for cost apportioning will be used when available to allocate the costs to the respective lines of business within National Grid US and Keyspan

Note:

The RTB does not change as the maintenance costs for the new six mid range UNIX servers will be the same as for the 43 small UNIX servers. However there would be additional/spare capacity to accommodate few more servers / partitions at no significant/additional costs.

Support (RTB) costs $k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Maintenance costs (for 43 servers)	151	151	151	151	151	755

Support (RTB) costs $k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing support costs	151	151	151	151	151	755
Maintenance costs (for 5 servers)	0	68[4]	162	162	162	554
New Support costs	0	68	162	162	162	554
Impact on RTB costs (new minus existing)	**0**	**(83)**	**11**	**11**	**11**	**(50)**
Variance to Plan	**0**	**(83)**	**11**	**11**	**11**	**(50)**

9.2 Cost Assumptions

- 2 TB of additional swing space (storage space required for migration) would be sufficient for all the migration activities
- There will be no change to the software maintenance costs as the number of server instances will remain the same

9.3 Benefits Summary

Benefits ($k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Reduced Capital investment (due to virtualisation and consolidation strategy)	900	0	0	0	0	900
Cost savings due to reduced use of data centre facilities	0	93	93	93	93	372
Total	900	93	93	93	93	1272

Note:

- The 43 servers are now currently racked in 8 X 48U sized racks
- Cost for hosting a single 48U fully loaded rack is approximately $1300 per calendar month, so per annum it amounts to $15,600. So the cost for 8 such racks would be $124,800
- The 5 IBM P570 servers can be racked in 2 X 48U racks; hence the overall cost will be $31,200. A net saving of $93,600
- The servers come with a one year maintenance warranty
- There will be no change to the existing support model and the number of resources as the number of instances supported will remain the same.

9.4 NPV

This is a NPC project addressing the refresh of aged assets to mitigate the risk associated with the aged infrastructure.

9.5 Additional Impacts

None identified at this point in time.

10. Execution Risk Appraisal

[4] The UNIX servers will be purchased with one year hardware maintenance. Hence the warranty cover will be from Oct 08 – Oct 09. So in year two the cost for hardware maintenance till Mar 10 is $68k. The aged UNIX servers would have been decommissioned by Apr 09 hence for year 2 the RTB will be only $68k. From FY 10/11 the hardware maintenance costs for the UNIX servers will be $162k.

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No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Delay in getting the resources on board will impact the completion of the project	National Grid IS manager will work with the Technical lead to identify the resources and engage them immediately at the start of the project	$26k	National Grid IS Project Manager
2	Delay in getting approval from the business/application support users may lead to delay in completion of the project	National Grid IS Manager/Technical lead will engage the Lines of Business/application owners to get approval in advance and plan accordingly.	$13k	National Grid IS Project Manager
3	Non availability of resources on time may lead to delay in completion of the project	National Grid IS manager will hire additional man power (contractors/ODCs) for the duration of the work	$48k	National Grid IS Project Manager
4	There is a risk that additional hardware may be required for replication and configuration purposes as the current version of the hardware may be incompatible	National Grid IS manager will check with the technical lead to assess the risk upfront before the start of the project	$20k	National Grid IS Project Manager

11. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of $1867k including a maximum risk range of $94k with a completion date of 04/10/2009.

(ii) Note the appointment of Chris Murphy as Project Sponsor and Joanne Engle, as Project Manager for the project deliverables.

Signature..... Date.....

John Reichelt, Chief Information Officer, Global IS

12. Appendices

A. Resources

Role Description	To	Name
National Grid Project Manager	Provide Project management support, coordination with the vendor	Joanne Engel
National Grid Programme Manager	To provide programme management support and visibility of the project to the senior management	Howard Parker

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National Grid Enterprise Architect	To validate the design and provide technical guidance	Danny Ensell
National Grid UNIX Manager	To provide strategic inputs and directions	Steve Trezza
National Grid Technical Lead	To provide technical support to the project manager and to liaise with the technical analysts (on a day to day basis) for delivery of the project	Gary Levandowski Bill Wilson
National Grid Technical Analysts	To implement the solution	2 Technical Analysts will be engaged for this project
National Grid, Application Analysts	To assess the performance and functionality of the application before productionisation	2 Analysts (the analysts will change as per the application/testing requirements)

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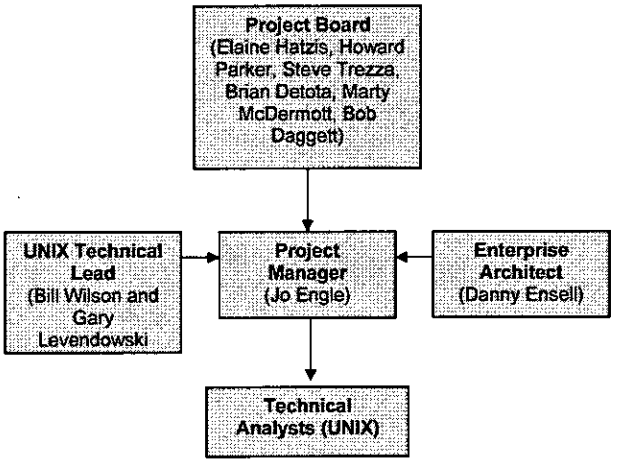
B. Project Structure:

Below is the project structure that has been established to deliver this project



C. Financial Impact – breakdown

The Total Project costs shown in the table below are indicative at this stage.

Pilot Project Costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Requirements & Design - OPEX						
Requirements & Design - CAPEX						
R&D SUBTOTAL						
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Risk Margin						
Total						
Development & Implementation – CAPEX						
National Grid – IS resource	342					342
Hardware/software	1431					1431
Risk Margin (6%)	94					94

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Pilot Project Costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
D&I SUBTOTAL						
TOTAL PROJECT COSTS	1867					1867
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

D. TCO log

Date Last updated: 21st Aug 08 — Year 0 is financial yr: 2008-2009

TOTAL COST LOG FOR IS INVESTMENTS

Enter system name: US - UNIX Server Consolidation

Enter Scheme No: ISCAP0823 K134CS

CONSOLIDATION COST SUMMARY

	Previous Cumulativ $'000s	Year 0 $'000s	Year 1 $'000s	Year 2 $'000s	Year 3 $'000s	Year 4 $'000s	Year 5 $'000s	Year 6 $'000s	Total $'000s
									-
Current Annual Support Costs		151	151	151	151	151	151	-	906
Previous Investments									-
This investment OPEX		-	-	-	-	-	-		-
This investment CAPEX		*1,867*	-	-	-	-	-		*1,867*
This Investment TOTAL		1,867	-	-	-	-	-		1,867
Future Investments			-	-	-	1,908	-	-	1,908
TOTAL COST	-	2,018	151	151	151	2,059	151	-	4,681

INCREMENTAL SUPPORT COST OF THIS INVESTMENT

Net Incremental Support Costs	-	- 84	11	11	11	11	-	- 40

TCO Log - US Unix Server Consolidation.

NIAGARA MOHAWK POWER CORPORATION
d/b/a National Grid
Case 10-E-0050
Attachment B to DKS-11

MEMORANDUM

National Grid

Date: September 13, 2002
To: IT Organization
From: M. Messuri
cc: Accounting Department
Re: Accounting for the Costs of Internal Use Software

Per the requirements of AICPA Statement of Position (SOP) 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use, entities should capitalize certain internal-use software costs. Costs that need to be capitalized or expensed are decided based on three stages relating to the development of internal use software. The SOP has identified these three stages as the following:

A. Preliminary Project Stage

Computer software costs that are incurred in the preliminary project stage should be expensed as incurred. Activities in this stage include conceptual formulation and evaluation of alternatives, determination of existence of needed technology, and final selection of alternatives.

B. Application Development Stage

1. Capitalized Costs - Most costs in this stage are capitalized, activities in this stage include design of the chosen path, design of the software configuration, coding, installation to hardware, and testing. Capitalization of the costs should cease when the software project is substantially complete and ready for its intended use[1], which generally is after all substantial testing is completed. Costs of computer software developed or obtained for internal use that should be capitalized include the following:

    a) external direct costs, examples of those costs include but are not limited to fees paid to third parties, including systems integrators, for services provided to develop the software during the application development stage, costs incurred to obtain computer software from third parties, and travel expenses incurred by employees in their duties directly associated with developing software;

    b) payroll and payroll-related costs for those who are directly involved with the project, eligible employees are those who help build the software, including, for example, programmers and end users who test the software. Eligible employees do not include administrative assistants because they are not involved directly with the development effort and

    c) interest costs.

[1] Note: "Pilot" projects that do not result in "production" systems are considered R&D and cannot be capitalized.

2. Expensed Costs - Training costs and data conversion costs[2] are expensed as incurred. General and administrative costs and overhead costs are not permitted to be capitalized as internal-use software costs.

C. Post-Implementation/Operation Stage

3. Expensed Costs - Internal and external training and ongoing maintenance costs[3] should be expensed as incurred.

4. Amortization - Capitalized costs are amortized over the estimated useful life, and adjusted periodically with changes in the estimates of the useful life or when the value of the asset is impaired. Amortization should begin when the software is adjudged ready to be placed "in service", which would otherwise occur upon the conclusion of end-user acceptance testing.

5. Capitalized Costs - The costs of "specified[4]" upgrades are capitalized.

Other Considerations

6. Pilot Projects – All costs for "pilot" projects that are not extended to production are considered research & development in nature, and are to be expensed.

7. Overhead Cots - SOP 98-1 says further that entities should not capitalize overhead costs even if management believes the overhead is incremental to the software project. For example, entities that rent facilities to house programmers devoted to new or upgraded software projects should not capitalize costs, such as

   - rent,
   - security, or
   - building maintenance.

If you have any questions regarding the intended use or interpretation of this policy, please call Mari Messuri in Westboro Accounting at (508)-389-3331, x23331 internal.

[2] Note: Applications systems purchased to facilitate training and/or data conversion can be capitalized
[3] Note: Applications systems purchased to facilitate training and/or data conversion can be capitalized
[4] A major business refresh is considered a "specified" upgrade that results in additional functionality. Further defined as modifications that enable the software to perform tasks that it was previously incapable of performing

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Case 10-E-0050
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CAPEX / OPEX IS Investment Proposal – Summary
DataStage Upgrade to Enterprise Edition
CTO, [Form of Control], Project No. INVP 0845
(A sanction paper by James A. Brennan – 21, February, 2008)

Description

The US hosted Data Warehouse at National Grid is being challenged by demands for more sophisticated analysis, faster turnaround, improved accessibility, and enhanced quality. To meet this challenge, a key component of the Data Warehouse infrastructure used for Extract, Transform and Load (ETL) of data from source application databases needs to be upgraded to continue to meet current and future SLA.

The upgrade of DataStage to the Enterprise Edition is an interim step that is needed pending the global ERP delivery. As system consolidation continues in the US, an increase in the capacity for DataStage will be required to support the business and the reporting and analysis domain. In addition it is likely that this increased capacity will be needed to support non ERP data and ETL tool consolidation as part of the global BI Strategy.

The investment in the increase capacity of DataStage enables the consolidation of software across NGUS and the former KeySpan. The investment in the upgrade to DataStage will enable the future reduction in contractor support as we appraoch day N.

Category: Value
Risk score: 44, (Primary Driver)
Project Classification: Medium Region: Global

Finance

Sanction Cost	$623k
Cost volatility: P20 cost:	P80 cost:
Probability that project cost will exceed tolerance:	
Project included in approved Business Plan No	IS Investment Plan v9.0 Draft/CAPEX
Project cost relative to approved Business Plan	75%
If cost > approved B Plan how will this be funded	
Other financial issues:	

Resources

Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	Green

Key issues

- Global BI Strategy includes providing a consolidated platform in the US in order to provide a single view of Business Intelligence for non ERP related data.
- Delay in placing the purchase order to the vendor because of delayed approvals may prevent taking advantage of IBM ELA discounts.
- Current version of IBM's DataStage ETL tool lacks capacity to meet growing volumes of data moving into the Data Warehouse presenting operational and business risk (unable to meet SLA

and latency issues can make the data unreliable) in support of current regional and global BI reporting

Key milestones

- Project Start Date – 4/2008 (Purchase Software)
- Complete Upgrade to EE 7.5.3 – 8/2008 (Implement EE 7.5.3 under current architecture as part of risk mitigation of initial upgrade)
- Upgrade to EE 8.0.1 – 1/2009 (Implement more recent version EE 8.0.1 with new product architecture)
- Project closure – 3/2009

Climate change

Contribution to National Grid's 2050 60% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- 21st Feb 2008 – IS Global Technology Governance Group (GTG)
- 28th Feb 2008 – IS Project Review Meeting (PRM)
- March 2008 - Procure and add to IBM Enterprise License Agreement (ELA)

Recommendations

The PRM is invited to:

(a) APPROVE the investment of $623k including risk margin of $44k by 28th Feb 2008
(b) NOTE that Venna Carroll is the Project Sponsor
(c) NOTE that James Brennan is the Project Manager and has the approved financial delegation to deliver the project

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....
Mark Prowse, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....
[Kelvin Beechey, Enterprise Planning & Development Manager]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

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Signature..... Date.....
[John Reichelt, Chief Technology Officer]

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CAPEX / OPEX IS Investment Proposal – Summary
DataStage Upgrade to Enterprise Edition
CTO, [Form of Control], Project No. INVP 0845
A sanction paper by James A. Brennan – 21, February, 2008

1. Background

National Grid has undertaken an initiative to build a Business Intelligence (BI) infrastructure that will provide business information in a timely, predictable, useable, and accurate manner. The US hosted Data Warehouse at National Grid is being challenged by demands for more sophisticated analysis, faster turnaround, improved accessibility, and enhanced quality. To meet this challenge, a key component of the Data Warehouse infrastructure used for Extract, Transform and Load (ETL) of data from source application databases needs to be upgraded to continue to meet current and future SLA.

The upgrade of DataStage to the Enterprise Edition is an interim step that is needed pending the global ERP delivery. The global BI Strategy being developed recognizes the need for ongoing support of BI while the global ERP solution is being implemented. In addition to providing increased capacity for ETL processing, the proposed upgrade to the Enterprise Edition of DataStage positions NGRID on the IBM Information Services platform and will provide a Meta Data Management solution as well as other information services.

Recent projects such as Project One, Mwork and Customer Data Integration (CDI) have increased the size of the Data Warehouse from 200 GB to 800 GB since the current version of Data Stage was installed. The consolidation of the NE Customer application on January 21, 2008 to the NY CSS Customer application increased the size of the Data Warehouse by more than 30%. The upgrade to the Enterprise Edition is needed as part of capacity planning. In addition it is likely that this increased capacity will be needed to support non ERP data and ETL tool consolidation as part of the global BI Strategy.

The investment in the increase capacity of DataStage enables the consolidation of software across NGUS and the former KeySpan. The investment will enable the future reduction in contractor support as we appraoch day N.

2. Driver

- Increase capacity of ETL platform to accommodate increase in data volumes as the consolidation of the Data Warehouse platform continues.
- Provide a BI solution for non ERP data as part of global BI strategy
- Aligns with BI Strategy to provide a Metadata Management solution
- Aligns with BI Strategy to provide a platform (IBM Information Server) that will delivery information as a service
- Ensures that SLA are maintained for data latency
- Aligns with the need to the consolidate software across NGUS and the former KeySpan thereby enabling the future reduction in contractor support as we appraoch day N.

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3. Project Description

The global BI Strategy being developed recognizes the need for ongoing support of BI while the global ERP solution is being implemented. The upgrade of DataStage to the Enterprise Edition provides the required capacity to meet current SLA and provides a platform for non ERP BI requirements. In addition, the upgrade also positions NGRID to take advantage of IBM's Information Server platform which includes a Metadata Management tool. Other key benefits include:

- Substantial savings in processing time for large data volumes
- Provide scalability to larger hardware platform as required
- Provides a platform for the addition of other Information Services such as data quality tools.
- Provides a standard Business Intelligence platform.
- Ensures SLA is met for data availability including new global data marts.
- Allows for the consolidation of the former KeySpan ETL processing onto single platform and provides savings due to maintenance and support of only one ETL platform

4. Business Issues

- Current version of IBM's DataStage ETL tool lacks capacity to meet growing volumes of data moving into the Data Warehouse presenting operational and business risk. The impact to the business is the risk in the current version of Data Stage's ability to meet SLA and latency issues that can make the data unreliable.
- Requirement to consolidate Data Warehouse onto a single platform in the US in order to reduce RTB costs.
- Requirement to consolidate Data Warehouse onto a single platform in the US to provide a single view of Business Intelligence analysis and reporting.
- Provides BI platform to support the business pending the delivery of the global ERP solution
- Provides BI platform to support the business's non ERP data

5. Options Analysis

Option	Recommendation	Rationale
Do Nothing	Not recommended	This option is not recommended as this option will not address the increase in data volumes that have resulted from projects such as ProjectOne. The current capacity of the ETL platform needs to be increased to continue to meet SLA and ensure expected data latency. The timelines of the delivery of data in the Data Warehouse is important to key business processes such as revenue reporting, KPI reporting and service order reporting for operations business units. Also this will not align with the strategic goal of the continuous consolidation of NGRID/KeySpan Data Warehouse platforms. Recent analysis by the Infrastructure team shows that the current version of DataStage is not scalable by adding hardware resources to the current environment
Upgrade IBM DataStage ETL tool to the Enterprise Edition	Recommended	This option is recommended as it provides a solution by upgrading an existing tool at NGRID. This option would facilitate increasing capacity of the ETL platform to accommodate the increase in data volumes as the

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Option	Recommendation	Rationale
		consolidation of the Data Warehouse platform continues. It also ensures that SLAs are maintained for data latency. The Enterprise Edition is scalable as additional hardware resources are added to the platform. This option aligns with BI Strategy to provide a Metadata Management solution. It allows an interim solution for the pending delivery of the global ERP solution. It will also provide a BI strategy for non ERP data. This option aligns with the need to consolidate software across NGUS and the former KeySpan thereby enabling the future reduction in contractor support as we appraoch day N.

6. Milestones

Key Milestones	Date	Responsible person...
Start	4/2008	James Brennan
[Key go / no go decisions points]		
Commissioning	8/2008	John Niemi
Completion	3/2009	John Niemi
Project Closure	3/2009	James Brennan

7. Safety, Environmental and Planning Issues

Not applicable

8. Investment Recovery

8.1 Investment Classification - Value

The savings in the RTB costs supports this being a value driven proposal

8.2 Regulatory Implications – This solution ensures the timeliness of reporting with regulatory implications such as Outdoor Street Lighting and Service orders

8.3 Customer Impact – N/A

9. Financial Impact

9.1 Cost Summary

This investment proposal seeks funds the full projects, as shown in the table below. A further breakdown of these costs is provided in Appendix B.

$k	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range	Upper Range

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								P20	P80
Project Cost	OPEX		63				63		
	CAPEX	413	147				560		
IS Investment Plan	OPEX								
	CAPEX		838						
Variance to plan	OPEX								
	CAPEX	413	-628						

The costs for this project will be allocated 100% to Information Services.

This project will decrease IS ongoing support costs, as detailed in the following table.

Support (RTB) costs	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing Support Costs	906	950	998	1050	1100	5004
New support costs	951	997	1050	687	736	4421
Impact on RTB costs (new minus existing)	**45**	**47**	**52**	**-363**	**-364**	**-583**
Variance to Plan						

9.2 Cost Assumptions

The current NGRID US RTB costs for DataStage include 2.5 FTEs plus annual software maintenance. The upgrade does not increase staffing requirements.

The current former KSE RTB costs for Informatica include 3 FTEs plus annual software maintenance. The upgrade will allow for the reduction in 2 FTEs (contractor support) as Data Warehouse and system consolidation continues.

9.3 Benefits Summary

Analysis performed with the vendor shows soft savings in that current ETL runtimes can be reduced 40 - 50% when upgrading to the Enterprise Edition. This could also be shown as cost avoidance as some data availability for reporting has regulator implications (i.e. Outdoor Street lighting, Meter Services)

Benefits	Year 1	Year 2	Year 3	Year 4	Year 5	Total

9.4 NPV

This is an NPV project. The Economic Model is being developed for the US business. IS Finance will calculate NPV

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9.5 Additional Impacts

None

10. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Non--availability of key CTO resources, will result in project schedule slippage	Project Manager appraised of the resource requirement.	6k	National Grid Project Manager
2	Delay in placing the purchase order to the vendor because of delayed approvals may prevent taking advantage of IBM ELA discounts	National Grid Project Manager will follow up with the stakeholders/sponsors to obtain timely approvals	38k	National Grid Project Manager
3	The timing of system consolidation and decommissioning of Informatica at the former KSE would defer benefit /savings	National Grid Project Manager will track project plan for system consolidation and report accordingly.		National Grid Project Manager

11. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of $623k (including a maximum risk range of $44k), with a completion date of 03/2009

(ii) Note the appointment of Venna Carroll, Director of Business Intelligence as Project Sponsor and James Brennan, manger Data Warehouse as Programme / Project Manager for the project deliverables.

Signature..... Date.....
[Venna Carroll , Director of Business Intelligence]

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12. Appendices

A. Resources

Project Management – National Grid - .25 FTE
Infrastructure Support for software installs - National Grid - .25 FTE
Data Warehouse Analyst - National Grid - 1 FTE
Business resource for UAT support and signoff – 2 FTE

B. Financial Impact – breakdown

Project Costs [$]k	2007/08 Year 1	2008/09 Year 2	2009/10 Year 3	2010/11 Year 4	2011/12 Year 5	Total
Requirements & Design - OPEX						
Requirements & Design - CAPEX	0	0	0	0	0	0
Requirements & Design – risk margin	0	0	0	0	0	0
Requirements & Design SUBTOTAL	0	0	0	0	0	0
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS		*96*				*96*
Internal resource – business						
External resource		*40*				*40*
Hardware						
Software	*375*[1]	*63*				*438*
Other (Travel costs)		*5*				*5*
Risk Margin	*38*	*6*	*0*	*0*	*0*	*44*
TOTAL PROJECT COSTS	*413*	*210*	*0*	*0*	*0*	*623*
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

[1] Includes DataStage Software and C++ Compiler

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C. TCO log / Economic Model

Note from IS finance - A TCO model with a 7 year time horizon shows the NPV change from a negative to a positive, with years 5 and 7.

Date last updated: 20 February 2008 — **Year 0 is financial yr2007-2008**

TOTAL COST LOG FOR IS INVESTMENTS

Enter system name: DataStage Upgrade to Enterprise Edition

Enter Scheme No: INVP 0845

LIFECYCLE COST SUMMARY

	Previous Cumulativ $'000s	FY 07/08 $'000s	FY 08/09 $'000s	FY 09/10 $'000s	FY 10/11 $'000s	FY 11/12 $'000s	FY 12/13 $'000s	Year 6 $'000s	Total $'000s
									-
Current Annual Support Costs		906	950	998	1,050	1,100	-	-	5,004
Previous Investments									-
This investment OPEX		-	63	-	-	-	-		63
This investment CAPEX		413	147	-	-	-	-		560
This Investment TOTAL		413	210	-	-	-	-		623
Future Investments			-	-	-	-	-	-	-
TOTAL COST	-	1,319	1,160	998	1,050	1,100	-	-	5,627

INCREMENTAL SUPPORT COST OF THIS INVESTMENT

Net Incremental Support Costs	45	47	52	- 363	- 364	-	-	- 583

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IS Investment Proposal Review Checklist

Part of the IS Governance Process

This checklist is used to confirm the necessary support for an IS Investment Proposal before it can be presented for sanction. It does NOT need to be presented with the Investment Proposal to the LoB sanctioning authorities.

A representative from the relevant IS department is required to confirm compliance with each requirement. As with Supporting Statements, this confirmation can be provided by email if required, which should reference the correct project name, reference number and version number.

	Confirmation that....	Confirm
IS Line of Business	The necessary project resources are named and available Dependencies with other projects have been identified	
IS Finance	The project is budgeted for / included within the relevant Business Plan, or appropriate funding by substitution is proposed	
	Ongoing support costs are in line with budgeted values (as per Investment Plan)	
	The costs and benefits in the business case have been calculated correctly	
	The financial value indicators are based on an approved Discounted Cash Flow conforming to company standards	
	A Total Cost of Ownership Log has been completed (where appropriate)	
CTO Enterprise Architecture	The Investment Proposal complies with design standards or has appropriate exemption The scheme aligns with National Grid IS Technical Strategy	
Service Planning & Change Management	The relevant infrastructure impacts and costs are understood and accepted Change Management requirements are understood	
Information Security	The Investment Proposal is compliant with the National Grid Information Security Policy	
Strategy	The Investment Proposal aligns with National Grid IS Strategy	

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CAPEX IS Investment Proposal – Summary
NY Purchase Receivables
Shared Services, Finance and Corporate, INVP 0937
A project sanction paper by Jack Hickson on behalf of Lee Klosowski – 5/13/08

Description

The project for converting the NY CRIS customer system to handle purchasing marketer charges that are presented on our bill was about 85% completed. It was taken to the point that all major functions were coded and implemented. Several major changes requests that were approved by the project steering committee and the cut over and testing with over fifteen marketers still remains to be worked on. The project was halted in September 2007 to work on other rate case items that are due in January 2008. The joint proposal with the NYPSC has required the purchasing of marketer charges to be completed in September 2008.

This is a request for the full scheme for the NY Purchase Receivables project. At the beginning of the project several changes were requested to align the NYC Purchase Receivable processes with those of National Grid.

Category: Mandatory
Risk score: 49 - Mandate
Project Classification: Medium Region: US

Finance

Sanction Cost $632K (includes $202K already sanctioned)
Project included in approved Business Plan? Yes/ INVP 0937
Project cost relative to approved Business Plan 100%
If cost > approved Business Plan how will this be funded?
Other financial issues: N/A

Resources

Availability of internal resources to deliver project: Green
Availability of external resources to deliver project: N/A
Operational impact on network system: N/A

Key issues

- ESCOs may not adhere to an aggressive schedule regarding testing
- ESCOs may not adhere to an aggressive schedule regarding ESCO balance reconciliation.
- ESCO balance in CRIS may not equal what was booked by Accounting in the General Ledger.

Key milestones

- Complete Acceptance testing - August 30, 2008
- Convert first ESCO – Beginning of September 2008
- Project closure – end of October 2008

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Climate change	
Contribution to National Grid's 2050 60% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- May 27, 2008 – IS Global Technology Governance Group
- April 3, 2008 – IS Project Review Meeting
- April 22, 2008 – FSSC

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of $632k which includes risk margin of $80k by June 2008. This includes $202K already sanctioned.

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Ruth Sullivan, Acting Head of IS for Financial, Corporate, and Shared Services, National Grid Global IS

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

William F. Edwards, Chairperson of the US Shared Services IS Sanctioning Committee

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CAPEX IS Investment Proposal – Summary
NY Purchase Receivables
Shared, Finance and Corporate, INVP 0937
A project sanction paper by Rich Balsano on behalf of Jeff Martin – 5/13/08

1. Background

This project is to enable the NY CRIS customer billing system to support the purchase of receivables from gas marketers whose charges are rendered on our bills. The NY Purchase Receivable project (POR) was started late 2006 and stopped in September 2007. At that time about 85% of the functionality was implemented. The project was stopped to address other near term items in the rate case that were due in January 2008.
The current rate case has ordered that we complete this effort in 2008. The remaining work consists of several major change requests that the project steering committee had approved and the converting each marketer which consists of testing with the marketer and reconciling any balance differences between our systems.

2. Driver

This project is mandated in the joint proposal dated 10-10-2007 for the rate case G-06-1186.

3. Project Description

The purpose of this project is to deliver the remaining set of POR business requirements that will bring KED in compliance with the PSC mandate by September 2008. Since upstate National Grid currently operates under a POR model, delivering this project will help align some of the billing processes between CRIS and National Grid's CSS Customer 1 Billing System.

The project work effort consists of

1) Updating and delivering the remaining set of business requirements that were defined in 2007
2) Reconciling balances and converting all qualified ESCOs
3) Implementing change requests approved by the project steering committee

4. Business Issues

None

5. Options Analysis

Option	Recommendation	Rationale
Do Nothing:	Rejected	This cannot be handled manually and it was agreed to be done as part of the merger agreement with the NY PSC
Defer project:	Rejected	This cannot wait until CRIS is replaced by some other system as was indicated in integration planning. The date is mandated for July 2008 and any planned replacement will be long after that.

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6. Milestones

Key Milestones	Date	Responsible person...
Complete Design	05/30/2008	Rich Balsano
Convert First ESCO	09/01/2008	Rich Balsano
Project Closure	10/31/2008	Rich Balsano

7. Safety, Environmental and Planning Issues

None

8. Investment Recovery

8.1 Investment Classification

Mandated. The project was agreed to in the joint proposal dated Aug 10, 2007.

8.2 Regulatory Implications

All single bill transportation customers in the KEDNY service territory will now have ESCO receivables purchased by the utility at a discount.

8.3 Customer Impact

Little to no impact to the customer.

9. Financial Impact

Run the business cost increase should be negligible. Uncollectible receivables and associated costs will be recovered though the discount mechanism.

9.1 Cost Summary

This investment proposal seeks funds the full project, as shown in the table below. This includes funds already sanctioned for the Requirements and Design stages. A further breakdown of these costs is provided in Appendix B. Year 1 was 2007/2008 when the project started and there was no investment plan since it was a Keyspan project.

$k		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX	70	212				282		
	CAPEX		350				350		
IS Investment Plan	OPEX	70	212				282		
	CAPEX		350				350		
Variance to plan	OPEX	0%	0%				100%		
	CAPEX	100%	100%				100%		

The costs for this project will be allocated 100% to KEDNY Gas Distribution.

This project will have negligible impact on IS ongoing support costs, as displayed in the following table.

Support (RTB) costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing Support Costs	0	0	0	0	0	0
New support costs	0	0	0	0	0	0
Impact on RTB costs (new minus existing)	**0**	**0**	**0**	**0**	**0**	**0**
Variance to Plan	**0**	**0**	**0**	**0**	**0**	**0**

9.2 Cost Assumptions

The above "Impact on RTB" projections reflect the expected negligible IS RTB costs a result of implementation of the entire project. Before and after costs are not possible to identify down to the level of the function being changed since CRIS has large batch processing that encompasses many functions besides those impacted by this change and we do not have the impacted costs isolated.

9.3 Benefits Summary

Benefits	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Increased cash flow	0	0	0	0	0	0

9.4 NPV

The NPV for this project is not applicable since this is a mandated project. The TCO log is attached in Appendix C, and includes assumptions.

9.5 Additional Impacts

10. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	ESCOs may not adhere to an aggressive schedule regarding testing and balance reconciliation	Begin reconciliation early and purchase phase 3 testing services from ESG	$80K	Project Manager

11. Recommendation

The Sanctioning Authority is invited to:

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(i) Approve financial sanction of $632K including $202K already sanctioned and a maximum risk range of $80K, with a completion date of October 30, 2008.

Signature..... Date.....
Lee Klosowski, Director Customer Choice/Supplier Services

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12. Appendices

A. Resources

In house IS resources are being used and are available for this proposal.

B. Financial Impact – breakdown

Project Costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Requirements & Design - OPEX	70	132				202
Requirements & Design - CAPEX						
Requirements & Design – risk margin		0				
R&D SUBTOTAL	**70**	**132**				**202**
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource		80				80
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS		270				270
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Risk Margin		80				80
D&I SUBTOTAL		**430**				**430**
TOTAL PROJECT COSTS	**70**	**562**				**632**
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

C. TCO log

I:\2008\NY POR\SDP Deliverables\3 - Desig

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Date Last updated:

Year 0 is financial year: 2007/08

TOTAL COST LOG FOR IS INVESTMENTS

Enter system name:

CRIS

Enter Scheme No: (e.g. ISREVxxxx or ISCAPxxxx)

INVP 0937 NY POR

LIFECYCLE COST SUMMARY

	Previous Cumulative $'000s	Year 0 $'000s	Year 1 $'000s	Year 2 $'000s	Year 3 $'000s	Year 4 $'000s	Year 5 $'000s	Year 6 $'000s	Total $'000s	
									-	+
Current Annual Support Costs		-	-	-	-	-	-	-	-	+
Previous Investments									-	+
This investment OPEX		-	*80*	-	-	-	-		*80*	
This investment CAPEX		*70*	*482*	-	-	-	-		*552*	
This Investment TOTAL		70	562	-	-	-	-		632	+
Future Investments			-	-	-	-	-	-	-	+
TOTAL COST	-	70	562	-	-	-	-	-	632	=

INCREMENTAL SUPPORT COST OF THIS INVESTMENT

Net Incremental Support Costs	-	-	-	-	-	-	-	-

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CAPEX / OPEX IS Investment Proposal – Summary
TOA NY & NE Upgrade
Transmission], ETO/EDO, Project No. 1224
(A sanction paper by Tracey Baker – February 21, 2008)

Description

This investment proposal seeks sanction of funds for the Requirements & Design stages of the project only. Sanction of the total project costs will be sought at the end of the Design stage.

Category: NPV

Risk score: 49, (Merge the NY and NE T & D outage scheduling process i.e. unify business practices across the US T & D Business. This is also an internal audit recommendation

Project Classification: Medium Region: US

Finance

Sanction Cost [Cost $80,000]

Cost volatility: P20 cost: £/$[xx]k P80 cost: £/$[xx]k *For projects >£5m /$10m only*

Probability that project cost will exceed tolerance: [xx]% (Monte Carlo analysis) *For projects >£5m /$10m only*

Project included in approved Business Plan? [INVP1224]

Project cost relative to approved Business Plan [+or-xx]%

If cost > approved B Plan how will this be funded? [Plan overspend/substitution [INVPxxxx]]

Other financial issues:

Resources

Availability of internal resources to deliver project: [Green]

Availability of external resources to deliver project: [Green]

Operational impact on network system: [Green]

Key issues

- [Homogenize the transmission & distribution, NY, NE & Keyspan outage application systems
- Provides a single T&D outage coordination system across all operating territories in the northeast.
- Moves towards industry standards for outage application programs.
- Lower system maintenance cost due to a common approach.

Key milestones

- Requirements and Design – April 2008.]
- Development and Implementation – September 2008
- Project closure – October 2008

Climate change

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Contribution to National Grid's 2050 60% emissions reduction target:	[Neutral]
Impact on adaptability of network for future climate change:	[Neutral]
Are financial incentives (e.g. carbon credits) available?	[No]

Prior sanctioning history:

- [date] – IS Global Technology Governance Group
- [date] – IS Project Review Meeting
- [date] – [sanctioning authority]

Recommendations

The [sanctioning authority] is invited to:

(a) APPROVE the investment of $80,000k by Feb 29, 2008
(b) NOTE that Peter Lebro is the Project Sponsor
(c) NOTE that Tracey Baker is the Project Manager and has the approved financial delegation to deliver the project

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....
Mark Prowse, Head of IS Finance, Global IS

[Line of Business] Finance

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....
[Name and title]

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....
[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....
[Name and title of sanctioning authority]

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CAPEX / OPEX IS Investment Proposal – Summary
TOA NY & NE Upgrade & Keyspan TOA Development
US Transmission, ETO/EDO, Project No. [xxx]
(A project sanction paper by [name of author(s) and sponsor] – date)

1. Background

The TOA is a critical business system that supports transmission and distribution outage scheduling activities through a web based application. The current and proposed vendor is Sun Net Consulting. Sun Net Consulting currently provides service to approximately 20 clients. Most recently the NYISO has purchased the new TOA program for their outage scheduling requirements.

National Grid NY and NE transmission and distribution processes over 30,000 applications each year. Almost all work on the transmission or distribution system requires an application in TOA to describe and coordinate the work. This program supports coordination and scheduling processes from the field initiated applications to ISO approval & tracking. The application also contains a comprehensive program for writing & retrieving switching orders. This program was developed such that the transmission and distribution business groups use the same program and database.

The TOA program was originally rolled out in NY in 2004 and has been modified along separate lines from NE. The result is a program that fulfills similar process requirements but is functionally different. In addition, changes are required to be made due to the break-up of REMVEC and new requirements of NERC TADS.

The Keyspan outage coordination process is different in both process and application. Keyspan will adopt the current new TOA program and database and use the processes currently in place in NY & NE.

Sun Net Consulting is the current vendor and the proposed vendor for the TOA program. The current NY & NE application was purchased by National Grid NE in 1999 and has been modified extensively to meet todays business needs. National Grid clients are satisfied with the application and database. Support and service from Sun Net Consulting has been very good, issues have been resolved expeditiously and requested modifications are developed in a timely manner.

NY & NE TOA Usage:
Current business processes require advanced applications for tracking of business metrics and tools that will now be shared between NE, NY & Long Island Operations. The intent is to create one program with a common database and interface to meet the US transmission & distribution needs in NY, NE, and Long Island. This application & database will also be a platform for future growth.

Keyspan TOA Proposed Usage:
One of the merger recommendations for cost saving measures was to fully implement the NY & NE TOA in Keyspan. While there were no FTE savings, implementation of the TOA program in Long Island will provide an efficient means to schedule and coordinate work from initiation to close-out. Other benefits are a reduction in phone calls and paperwork and increased accountability. It also provides a searchable database of past outages. The expenditures required to implement TOA in Long Island was included in the Cost to Achieve reports in the merger documentation.

2. Driver

The Business Drivers for this project are to:

- Merge the NY and NE T & D outage scheduling process i.e.unify business practices across the US T & D Business. This is also an internal audit recommendation.
- Rollout to Keyspan - best practice merger recommendation
- Incorporate new mandatory reporting requirements

3. Project Description

The proposed solution is to upgrade the current TOA application in NY & NE and to apply the upgraded software to Keyspan in Long Island. This will unify the National Grid US approach to outage coordination and tracking. The solution will take the current Sun Net Consulting Software and incorporate best practices of the current National Grid TOA to produce a premier application for scheduling, outage coordination and metrics tracking. The new software will also have

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NERC required reporting for the Transmission Availability Data System (TADS). In addition to the current features of TOA, National Grid is requesting upgrades to enhance reporting, tracking, and metrics. The proposed solution will help make National Grid a leader in the industry. After the program is developed there will be training on the new program in NY, NE and Long Island. NY experienced this rollout in 2002 and lessons learned will be applied to minimize risk and help to make the integration more efficient.

Additionally, the NYISO recently evaluated outage application products available on the market and decided to purchase the Sun Net Consulting TOA. It is evident through our own experience and that of the NYISO's that that there are very few vendors that offer specialized outage coordination programs as comprehensive as the TOA. National Grid transmission and distribution like the current TOA and have integrated the program into many business processes and the program and vendor have performed well.

This proposed solution is low risk for NY and NE and with our current experience and will allow us to implement the program on Long Island without major difficulties

4. Business Issues

The risks of not proceeding are the inability to:

- Effectively schedule the increased capital spend.
- Identify issues in scheduling and coordination, thereby decreasing efficiencies and possibly effecting capital spending plan.
- To maintain the TOA in upcoming years.
- To develop a unified platform for future expansion.
- To develop into an industry leading application.

Enhance compliance to Sarbanes Oxley due to increased tracking of changes.

5. Options Analysis

Option	Recommendation	Rationale
[TOA Upgrade for NY & NE and merge with Keyspan]	[recommended]	Common platform for NGRID in the United States for both Transmission and Distribution that supports the corporate strategy for one outage and scheduling process.
Do Nothing:	Rejected	Maintaining an old systems and not combining business processes will produce less efficiency and higher costs.
Defer project:	Rejected	Business Resources internal and external are ready and available.
[Option 3]:		
[Option 4]:		

6. Milestones

Key Milestones	Date	Responsible person...
Start [Key go / no go decisions points] Commissioning Completion Project Closure	[03/03/2008]	Tracey Baker

7. Safety, Environmental and Planning Issues

n/a

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8. Investment Recovery

8.1 Investment Classification

8.2 Regulatory Implications

This investment will enhance compliance with Sarbanes-Oxley commitments due to the various changes to tracking data.

8.3 Customer Impact

9. Financial Impact

9.1 Cost Summary

[The following paragraphs are provided as basic commentary – delete whichever does not apply. The sentences can be altered if required. Amend / Replace any text in square brackets]

The following table show the full costs for the project, which are indicative at this stage. This investment proposal seeks sanction of funds for the Requirements and Design stages of the project only.

£k / $k		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX	$80,000	447,000				527,000		
	CAPEX								
IS Investment Plan	OPEX								
	CAPEX								
Variance to plan	OPEX								
	CAPEX								

The costs for this project will be allocated to [Transmission Line of Business (60 %)] and [Distribution Line of Business (40 %)]. In addition, Keyspan, Long Island will be charged the total amount for implementation, training, etc., that directly coorelates to their implementation

Support (RTB) costs	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing Support Costs						
New support costs						
Impact on RTB costs (new minus existing)						
Variance to Plan						

9.2 Cost Assumptions

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9.3 Benefits Summary

Benefits	Year 1	Year 2	Year 3	Year 4	Year 5	Total

9.4 NPV

The NPV for this project is [xxxxx]. The [TCO log / Economic Model] is attached in Appendix C, and includes assumptions.

9.5 Additional Impacts

10. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	[Risk Description]	[What counter measures or actions are we taking?]	[% / £k/$K]	

11. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of [$80,000k with a completion date of [29/02/08]

(ii) Note the appointment of Peter Lebro, VP Transmission Network Operations as Project Sponsor and Tracey Baker, IS US Transmission Project Manager for the project deliverables.

Signature..... Date.....
[Project sponsor and title]

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12. Appendices

A. Resources

B. Financial Impact – breakdown

Project Costs [£/$]k	2007/08 Year 1	2008/09 Year 2	2009/10 Year 3	2010/11 Year 4	2011/12 Year 5	Total
Requirements & Design - OPEX	$80,000					$80,000
Requirements & Design - CAPEX						
Requirements & Design – risk margin						
Requirements & Design SUBTOTAL	**$80,000**					**$80,000**
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Risk Margin						
TOTAL PROJECT COSTS						
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

[Where the investment proposal is for a non-regulated business, include the Uplift schedule here as well.]

C. TCO log / Economic Model

[Please include a copy of the Summary Sheet from the TCO log / Economic Model, and embed a copy of the full log / model in the document]

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IS Investment Proposal Review Checklist

Part of the IS Governance Process

This checklist is used to confirm the necessary support for an IS Investment Proposal before it can be presented for sanction. It does NOT need to be presented with the Investment Proposal to the LoB sanctioning authorities.

A representative from the relevant IS department is required to confirm compliance with each requirement. As with Supporting Statements, this confirmation can be provided by email if required, which should reference the correct project name, reference number and version number.

	Confirmation that....	Confirm
IS Line of Business	The necessary project resources are named and available Dependencies with other projects have been identified	
IS Finance	The projectis budgeted for / included within the relevant Business Plan, or appropriate funding by substitution is proposed	
	Ongoing support costs are in line with budgeted values (as per Investment Plan)	
	The costs and benefits in the business case have been calculated correctly	
	The financial value indicators are based on an approved Discounted Cash Flow conforming to company standards	
	A Total Cost of Ownership Log has been completed (where appropriate)	
CTO Enterprise Architecture	The Investment Proposal complies with design standards or has appropriate exemption The scheme aligns with National Grid IS Technical Strategy	
Service Planning & Change Management	The relevant infrastructure impacts and costs are understood and accepted Change Management requirements are understood	
Information Security	The Investment Proposal is compliant with the National Grid Information Security Policy	
Strategy	The Investment Proposal aligns with National Grid IS Strategy	

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OPEX IS Investment Proposal – Summary
Settlement Solution INVP 1232
U.S. Shared Services, F,SS&C, Project No. X08860

(A project sanction paper by Melissa Nieforth and John Oakes for John Leana – 08 June 2009)

Description

This investment proposal seeks funding for analysis and evaluation of Settlement systems and processes for Upstate New York and New England. The deliverables from the analysis will include system and process documentation which will identify what areas need to be targeted in order to mitigate current risks, transition the knowledge-base and facilitate a long term Settlement strategy.

This investment proposal seeks sanction of funds for the Analysis stage of the project only.

Category: Policy-driven
Risk score: 36 (Primary Driver – Reliability)
Project Classification: Low Region: US

Finance

Sanction Cost: $50k (including $ 0k Risk Margin)
Project included in approved Business Plan? Yes - INVP1232
Project cost relative to approved Business Plan: - 91%

$'000s	Current planning horizon								
	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6+	Total	Lower Range P20	Upper Range P80
Proposed Investment	50k						50k		

Resources

Availability of internal resources to deliver project: Green
Availability of external resources to deliver project: N/A
Operational impact on network system: N/A

Key issues

- Business subject matter experts leaving on VERO, limited/specialized IS Settlement systems expertise and lack of documentation.
- The risk of challenge to Settlement processing is on the increase. The issue is ultimately stated in the correctness of allocation to the Load Serving Entities. Over the last year there has been approximately $55k contested with a $20M – 10 yr. open claim from NYSEG still pending through FERC.
- Components of the current Settlement systems are manually interfaced; including complex calculations that can cause financial harm if done incorrectly.
- Frequent maintenance to major components of the systems.

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d/b/a National Grid
Case 10-E-0050
Attachment C1 to DKS-11

Key milestones

- October 2009 – Analysis Phase (System & Process Documentation)
- October 2009 - Project Completion

Climate change

Contribution to National Grid's 2050 80% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- 24 July 2009 – IS Global Technology Governance Group
- 28 July 2009 – IS Project Review Meeting
- 12 August 2009 – FSSC Sanctioning Meeting

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of $50k including risk margin of $0k by October 2009

(b) NOTE that John Leana, Director of Meter Data Services, is the Project Sponsor

(c) NOTE that Cindy Tomeny is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

John Leana, Director of Meter Data Services

IS Finance

I hereby confirm that this project has been included in the [Line of Business] Business Plan

Signature..... Date.....

Rudy Persico, Director, IS Finance ED&G / FSS

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

Jeff Dailey, Director, Customer Portfolio, Finance and Meter Data Services

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Case 10-E-0050
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OPEX IS Investment Proposal – Summary
Settlement Solution INVP 1232
U.S. Shared Services, F,SS&C, Project No. X08860
(A project sanction paper by Melissa Nieforth and John Oakes for John Leana – 08 June 2009)

1. Background

The hourly energy market consists of generation, tie lines and loads. Settlement is the reconciliation of retail sales (loads) to delivered power (Gen & Ties). Settlement also allocates loads to each Load Serving Entities (LSE) within ISO defined sub-zones. The hourly generation and tie line quantities are directly measured and reported each day. However, hourly supplier loads must be estimated.

Over the past year, Meter Data Services has centralized legacy National Grid operations in Syracuse, New York. In addition to knowledge transfer, consolidation of various processes and tools is desired in order to provide consistent service, mitigate external challenges and improve the availability, reliability and associated costs of supported Meter Data Services systems.

Due diligence requires immediate analysis and documentation of existing systems and business processes due to business subject matter expert VEROs, limited IS Settlement systems expertise and lack of documentation.

- Many of the Settlement business processes involve frequent data manipulation for formatting purposes. This manipulation is performed both manually and programmatically utilizing various disparate software tools. This frequent manipulation compromises data integrity and increases the company's exposure. A complete understanding of the business processes and systems is warranted.

- Major components of the Settlement systems are hard coded and therefore require frequent code changes from IS for variables that should be performed by the business. In New England, the PULSE system is a series of SAS scripts that were developed over several mergers. In Upstate New York, the ISO Retail System calculations are not fully understood.

2. Driver

The primary driver is reliability with a risk score of 36.

3. Project Description

This project will evaluate and document Settlement systems and processes for Upstate New York and New England in order to mitigate current risks and facilitate the implementation of a future consolidated solution. As part of a continuous improvement effort, consolidation is required to improve the availability, reliability and associated costs of supported Meter Data Services systems.

The deliverables from the project will include system and process documentation. This will enable the business to identify what areas need to be targeted in order to transition the knowledge-base and facilitate a long term Settlement strategy. Once addressed, a solution and/or strategy will be evaluated.

Note: Former KeySpan will not be considered for consolidation until a Global ERP solution is better defined. Inclusion will not be factored into this project as a corporate data warehouse currently interfaces their MV-90 to KeySpan's billing system (CAS/CRIS).

4. Business Issues

Due to business subject matter expert VEROs, limited IS Settlement systems expertise and lack of documentation, there is a need to gain an understanding of the processes and how they related to the systems. In the short term, this will allow for knowledge transfer for both the business and IS. It will also provide a foundation for a future strategic solution.

The risk of challenge to Settlement processing is on the increase. The issue is ultimately stated in the accuracy of allocation to Load Serving Entities with the unaccounted for energy as the balancing factor. Specifically over the last year there have been 6 challenges from external parties, two of which have been resolved without monetary settlement and approximately $55k contested in the other cases. There is also pending, a $20M, 10 year open issue before FERC from a NYSEG claim.

Depending on the scope and accuracy of the data in question, a Settlement system that can reduce the risk of processing via increased transparency, accountability and with the ability to produce accurate reporting in the event of a challenge will help alleviate the above risks.

5. Options Analysis

Option	Recommendation	Rationale
Do Nothing:	Rejected	Subject matter experts are VEROing and there is limited IS Settlement systems expertise. Day to day Settlement will be impacted.
Defer project:	Rejected	VERO timeline will not support deferring the project.
Analyze and Document Settlement	Recommended	Enables the understanding of the Settlement processes and systems.

6. Milestones

Key Milestones	Date	Responsible person...
Analysis Phase (System & Process Documentation)	October 2009	Cindy Tomeny
Project Completion	October 2009	Cindy Tomeny

7. Safety, Environmental and Planning Issues

Not applicable.

Investment Recovery

8. Investment Classification

Classification of project is Policy-driven

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9. Regulatory Implications

This project will enable continued compliance with the ISOs, with the intent of improving the timeliness, accuracy, and reliability of data, reducing exposure. The Meter Data Services Settlement analysts will have a better understanding of the data allowing for more accurate reporting.

10. Customer Impact

This project will allow Meter Data Services to maintain and/or improve timely and accurate Settlement reporting.

Financial Impact

11. Cost Summary

The following table show the full costs for the project, which are indicative at this stage. This investment proposal seeks sanction of funds for the Analysis Phase of the project only. These amount to $50k including $0k risk range – a detailed breakdown is provided in Appendix B.

$'000s		Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6 +	Total	Lower Range P20	Upper Range P20
Project Cost	Opex	50						50		
	Capex	0						0		
IS Investment Plan	Opex	188						188		
	Capex	349						349		
Variance to plan	Opex	138						138		
	Capex	349						349		

The costs for this project will be allocated 100% to legacy National Grid (Electricity, Distribution and Generation line of business).

There will be no Run the Business Costs associated with this project

RTB costs $'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Total
Current Annual RTB costs	$0k					$0k
New Annual RTB costs	$0k					$0k
Impact on RTB costs (new minus existing)	**$0k**					**$0k**
Variance to Plan	**$0k**					**$0k**

12. Cost Assumptions

A $55/hour IS labor rate was used for estimating the project costs.

13. Benefits Summary

There are no financial benefits

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14. NPV

N/A

15. Additional Impacts

N/A

16. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Settlement Subject Matter Expert may not be fully available to the project team due to production issues.	Project scheduling will address availability.	$0K	Project Manager
2	Settlement Subject Matter Expert Accelerated VERO date	Project schedule will need to be adjusted. More business resources may be activated.	$0K	Project Manager

Appendices

A. Resources

Step 1:

Role	National Grid Resources (FTEs)		External Resources (FTEs)			
	IS	Business	Contractor	Systems Integrator	ODC	Other
Program Managers (PgM)						
Project Managers (PM)	.30					
Business Analysts (BA)	.30					
Application Developer (AD)	1.50					
Enterprise Architects (EA)						
Planner (Plan)						
Database Administrator (DBA)						
Data Architects (DA)						

The following resources are NOT included in the project costs:

(1) Business Sponsor – John Leana
(1) Client Project Manager – William Gilbert
(1) Client Lead – John Oakes
(2) Stakeholders/Managers – Michael Murphy and Carol Teixeira
(6) Business Subject Matter Experts: Roberta Laccetti, Jeff Glose, Robert Larimore, Mary Rose Ranieri, Jeff Barbaro and Dave Stempowski.

Step 2:

External Resource Engagement:
N/A

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Step 3:

Name	Role*	Source**	FTE	Start	End	Availability***
Cindy Tomeny	PM	IS	.30	Aug 08	October 09	Confirmed
Melissa Nieforth	BA	IS	.30	Aug 08	October 09	Confirmed
Nancy Lederman	DV	IS	.80	Aug 08	October 09	Confirmed
Joe Kruczlnicki	DV	IS	.70	Aug 08	October 09	Confirmed

* FTE calculation represents a percentage of the resource's time for each month (i.e. For the PM: 30% for August, 30% for September, and 30% for October).

B. TCO Log

Not applicable at this stage

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Case 10-E-0050
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OPEX IS Investment Proposal – Summary
AI-Collection Data Hygiene Initiatives – INVP 1235
US Finance and Shared Services, Shared, Project No., B07345/TBD
A project sanction paper by Carla Coglitore on behalf of Gary Grant – 7/1/08

Description

This document requests the sanction of the project Account Initiation (AI)–Collection Data Hygiene. This project will maximize efficiency for the account initiation process and minimize bad debt through a Data Sourcing effort. It also will include a monthly feedback file with suggestions for data cleansing. This will enhance and improve our ability to locate and identify our customers for immediate collection treatment. Rather than building this internal to our Upstate NY and New England Customer Service System (CSS) we are using a web interface application so it can be shared by all companies for any customer system.

This investment proposal seeks sanction of funds for the Requirements & Design stages of the project only. Sanction of the total project costs will be sought at the end of the Design stage.

Category: NPV
Risk score: 46, NPV
Project Classification: Medium Region: US

Finance	
Sanction Cost	$182k
Project included in approved Business Plan?	INVP 1235 [Investment Plan Version 1.0]
Project cost relative to approved Business Plan	-18% (including the risk margin) based on initial estimates

Resources	
Availability of internal resources to deliver project:	Amber
Availability of external resources to deliver project:	Amber
Operational impact on network system:	N/A

Key issues

- The Requirement and Design phase for the web interface application may uncover the need for a change to the current Business Process for issuance of a Connect Order.
- To obtain the maximum value for the Data Sourcing feature there may be significant stakeholder impacts.

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Case 10-E-0050
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Key milestones

- Business Requirements – August 2008
- Technical Design – October 2008
- Functional Design – October 2008
- Detail Design - October 2008
- Code and Test – November 2008
- User Acceptance Test – December 2008
- Operations Acceptance Test – December 2008- January 2009
- Project Completion – January 2009

Climate change

Contribution to National Grid's 2050 60% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- July 3, 2008 – IS Project Review Meeting
- July 15, 2008 FSSC (Requirements and Design)

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of $182k including risk margin of $24k of a total project cost of $420k including a risk margin of $55k by January 2009.

(b) NOTE that Andrew Adriance, Acting Director of Credit and Collections is the Project Sponsor

(c) NOTE that Riziel Ramos is the Project Manager and has the approved financial delegation to deliver the project

IS Finance, Global

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Ruth M Sullivan, Acting Head of Finance Shared Services Corporate

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Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

William F Edwards, Executive Vice President of US Shared Services

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Case 10-E-0050
Attachment C1 to DKS-11

OPEX IS Investment Proposal – Summary
AI-Collection Data Hygiene Initiatives
US Finance and Shared Services, Shared, Project No. B07345/TBD
A project sanction paper by Carla Coglitore – 7/1/08

1. Background

Account Initiation (AI) currently happens in Upstate NY and our NE companies by using our Customer Service System (CSS). We validate a customer using only their Name and Social Security Number (SSN). If the customer is unwilling to provide their SSN or if they do not have a SSN our real-time process for account initiation is not supported, which limits what we can do while the customer is on the phone. The customer is then required to make a copy and fax us two forms of ID which is a very cumbersome process for them. The off-line work group receives the fax, validates the information and may even need to contact the customer, then releases the Connect Order.

When a customer calls requesting service procedurally the Rep needs to look for any outstanding final bills in the customer's name. Since there may be variations of the customer's name in our system; querying the customer database looking for uncollectible bills (UCB) is cumbersome and time consuming. When the outstanding uncollectible bills are identified, the collection rules permitted on those outstanding balances may vary within the Public Service Commission guidelines.

Contact information for our customers' change from when they first initiated service. Most times, customers do not update their phone numbers and mailing address especially after they final their service. Today we do not work return mail to research and update our system with a new forwarding address. Final bills may go unpaid simply due to incorrect contact information.

There are certain limitations that have been described; Experian will be able to provide us an advantage. By leveraging our recently implemented Portfolio Management Program (INVP-1290), where we send a file of all accounts that bill, Experian will have all our account information. Also, we have separately provided them our entire uncollectible bill file which enables them to associate or "pinpoint" our accounts by customer. Then, upon AI validation, Experian will provide us more options for first call resolution along with those customers' uncollectible bill accounts.

2. Driver

Our driver is the reduction of bad debt. Experian will be able to provide us "real-time" positive identification processes without the need for back-office work. They will be able to use our own customer history data for Uncollectible Bill collection by using a "pinpoint" process to associate our uncollectible bill file. This is combined with Experian's resources for data cleansing. This advantage will provide us up to date information on our customers. Updating our customer's contact information is a necessary aspect to our Collection process.

3. Project Description

There are fundamentally three parts to this Project. The first is the Account Initiation/ Positive Identification for Residential Accounts. The second piece is Data Hygiene for both Residential and Commercial Accounts which will provide us updated customer contact information. Thirdly, is the change to Experian's preferred method of file communication of

SFTP. This will enable Experian to communicate with our nightly batch files automatically without the human intervention on their side that is necessary today. This new protocol will be shared by PMP along with this project. Additionally we intend to accommodate a web interface application concept to this project. This approach enables any Customer System the ability to participate and obtain value. Therefore this enhancement will be capable of being shared with all companies including Upstate NY, Downstate NY, LI, RI, MA, and NH, regardless of billing system.

By using Experian's messages and database tools directly instead of building it in CSS, clearer and more distinct messaging will be provided for our users. During Account Initiation (AI), the User will submit the customer's name and social security number same as today. However, if an initial validation does not occur, more options will be available. Experian's web browser will be called and the rep will be able to enter more information to Pos ID the customer such as date of birth, previous address, phone number, and driver's licence. This is a vast improvement over today's process. This will provide the customer better service, it is more convenient and will be more efficient for National Grid.

We are proposing in addition to the Daily files that Experian receives through our Portfolio Management Program (PMP) recently implemented in June 2008, we will send another daily file of all our Non-Active Residential accounts (final, pending final, written-off, pending-write off, etc), and that had a financial transaction. This will provide Experian the necessary information to maintain our data for uncollectible bill identification. Experian will apply our necessary business rules during the Account Initiation process and communicate the customer's uncollectible bill (UCB) balances to us as well. This will enable us to expedite the process and correctly reconcile accounts and their past due balances so the appropriate action can occur. Automation of this function will save the Customer Rep valuable time while on the phone with the customer and most of all the ability to reconcile accounts under one customer number. It will no longer be necessary to search CSS for balances owed and determine which ones are deemed collectible.

Experian has access to many sources of customer information and may have an update to our customers' forwarding address, especially if the customer has moved out of our service territory. By correcting the mailing address on the bill immediately, our chances of collection improve. Experian will provide the update of information in a monthly file which will create a dataset for us to use. Business rules will be defined when updates to the billing system are necessary to revise customer information. Updating contact information is an important aspect to our collection process.

4. Business Issues

We will be able to better identify our uncollectible bill (UCB) balances that belong to the customer requesting service, especially when nuances in their name exist. Experian will assist us in identifying these balances up front so we can make the customer responsible for them and reconcile their accounts. Also correct contact information will assist us in our Collections efforts.

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Case 10-E-0050
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5. Options Analysis

Option	Recommendation	Rationale
1- Remain with FTP-PGP file transfer protocol	rejected	Experian does not support this format and we rely on their manual process for file transfer.
1- Update to SFTP Protocol from FTP-PGP file transfer	recommended	Experian automation supports SFTP and will be the standard going forward
2- Build changes within CSS for AI, Pos ID and Pinpoint functions	rejected	If restricted to CSS then will not be applicable to other systems without necessary system specific coding.
2- Web interface application concept to communicate with Experian's database for AI and uncollectible bill (UCB)	recommended	Will not necessitate building and coding functions within any one billing system
3- Rely on our Reps to identify the customer's associated uncollectible bill (UCB) accounts	rejected	This is our current practice. If the accounts are not reconciled in CSS it is a tedious task and often we do not have sufficient information to do a thorough job.
3- Experian will identify and provide us the uncollectible bill (UCB) accounts and balances.	recommended	Providing Experian our database permits them to use other means not available to us to Pinpoint our customers.
4- Do nothing for Data Hygiene	rejected	There is no current process in place to work return mail. So we are not proactively making updates to customer information to improve collection.
4- Data Hygiene will provide current contact information if different than what our records indicate	recommended	Experian again has other means available to gain current contact information that will expedite our chances for collection.

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6. Milestones

Key Milestones	Date	Responsible person...
Business Requirements	August 2008	Business- Service Analyst/
Technical Design	October 2008	IS Analyst
Functional Design	October 2008	IS Analyst
Detailed Design	October 2008	IS Analyst
Code and Test	November 2008	IS Analyst
User Acceptance Test	December 2008	IS Analyst / Business-Service Analyst / IS Analyst/Experian/ Client Lead
Operations Acceptance Test	December – January 2009	IS Analyst / Business-Service Analyst / Experian / Client Lead
Implementation	January 2009	Project Manager

7. Safety, Environmental and Planning Issues

N/A

8. Investment Recovery

- NE projected annual return of about $378K for uncollectible bill (UCB)
- NY projected annual return of about $200k for uncollectible bill (UCB)

8.1 Investment Classification

This Project is classified as NPV

8.2 Regulatory Implications

N/A

8.3 Customer Impact

Provide customer real-time interactive responses, expediting service to customers, there will be little need for customers to have to fax information for the account initiation process.

9. Financial Impact

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9.1 Cost Summary

The following table show the full costs for the project, which are indicative at this stage. This investment proposal seeks sanction of funds for the Requirements and Design stages of the project only. This amounts to $182k including $24k risk range – a detailed breakdown is provided in Appendix B.

Note – For this investment proposal all references to Yr 1 = Fiscal Year 2009

$k		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX	$58k					$58k		
	CAPEX	$362k					$362k		
IS Investment Plan	OPEX	$69k					$69k		
	CAPEX	$426k					$426k		
Variance to plan	OPEX	- 11					-11		
	CAPEX	- 64					-64		

The costs for this project will be allocated as follows: 84% to Electric Distribution and 16% to Gas in the legacy NationalGrid NY and NE areas.

This project will increase IS ongoing support costs, as detailed in the following table.

Support (RTB) costs $k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing Support Costs	$2	$2k	$2k	$2k	$2k	$10k
New support costs	$0	$4k	$4k	$4k	$4k	$16k
Impact on RTB costs (new minus existing)	**$0**	$2k	$2k	$2k	$2k	**$8k**
Variance to Plan	**$0**	$2k	$2k	$2k	$2k	**$8k**

9.2 Cost Assumptions

Experian fee is $0.59 per transaction hit including the following feedback and account specific messaging; Positive Identification, Red Flag/ Fraud Alerts and a list of uncollectible bill (UCB) accounts if appropriate.

9.3 Benefits Summary

Benefits	Year 1	Year 2	Year 3	Year 4	Year 5	Total
NE projected reduction UCB		378K	378K	378K	378K	1.5M
NY projected reduction UCB		200K	200K	200K	200K	800k

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9.4 NPV

The initial estimated NPV for this project is 1,511.

9.5 Additional Impacts

Depending on how the Web interface application is technically implemented, there could be impacts to other business departments. For example there could be a need for Business Process changes for Phone reps in the Customer Service Organization.

10. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Knowledgeable personnel for Credit and Collections, Web and IS.	Secure appropriate resources internal/external as quickly as possible	15%	Jeff Dailey/ Riziel Ramos

11. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of $182k (including a maximum risk range of $24k), with a completion date of October 2008.

(ii) Note the appointment of Andrew Adriance, Acting Director of Credit and Collections as Project Sponsor and Riziel Ramos, IS Shared Services Customer Portfolio Finance and Corporate as Project Manager for the project deliverables.

Signature..... Date.....
Andrew Adriance, Acting Director of Credit and Collections

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12. Appendices

A. Resources

Project Manager, Service Analyst, DBA, Enterprise Tech Support, IS Analyst

B. Financial Impact – breakdown

The Total Project costs shown in the table below are indicative at this stage.

Project Costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Requirements & Design - OPEX	25					25
Requirements & Design - CAPEX	133					133
Requirements & Design – risk margin	24					24
R&D SUBTOTAL	**182**					**182**
Development & Implementation – OPEX						
Internal resource – IS	33					33
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS	174					174
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Risk Margin	31					31
D&I SUBTOTAL	**238**					**238**
TOTAL PROJECT COSTS	**420**					**420**
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

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Description CAPEX IS Investment Proposal – Summary

Contact Centers Call recording replacement

Contract Center, Project No. INVP 1255

(A sanction paper by Martin C. Gately 04/18/2008)

Description

The Contact Center Call Recording application is used in various NGRID locations to monitor and record both voice and data of our Customer Service Representatives(CSR) interactions with our external customers. This application helps to monitor many areas of the CSR's responsibilities. Those include Quality monitoring of both the voice interaction with the customer and the data tools used to satisfy the customer inquiry as well as suggested training development.

Currently National Grids Contact Center Call Recording application runs within several NGRID Contact Center locations on various applications. The application covers over 500 CSR's in the Contact Centers, these centers are listed as: Northboro Ma, Brooklyn, NY. Melville NY. (Long Island). Waltham, Ma. Syracuse NY. and Buffalo NY. Some of the locations run on a different version of the same application and in some cases on a different vendors' application.

Each site varies on support agreements, internally with IT support and externally with vendor and third party support, with various agreements for data base support on various DBMS from Oracle and SQLServer residing on a Windows platform. In this phase we will be upgrading all hardware and software in two locations Northboro Contact Center and Syracuse, NY Contact Center.

This investment proposal seeks sanction of funds for the Requirements & Design stages of the project only. Sanction of the total project costs will be sought at the end of the Design stage.

Category: Policy-driven
Risk score: 49
Project Classification: Low Region: US

Finance

Sanction Cost	$750K
Cost volatility: $0K	
Probability that project cost will exceed tolerance: Small	
Project included in approved Business Plan?	Yes - INVP1255
Project cost relative to approved Business Plan	100% *(compared to original submitted Investment plan)*
If cost > approved B Plan how will this be funded?	N/A
Other financial issues: No	

Resources

Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	N/A

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Key issues

- Replacing application servers in Northboro and Syracuse Contact Center sites
- Upgrading software to newer release level at both sites
- Aging infrastructure and move of DB off of Windows platform to a Unix platform
- Offering a 'combined' reporting platform for the (2) Contact Centers

Key milestones

- Start date 4/08
- Hardware delivery date: 6/08
- Completion – 07/08
- Project closure – 08/08

Climate change

Contribution to National Grid's 2050 60% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- [N/A] – IS Global Technology Governance Group
- [N/A] – IS Project Review Meeting
- [N./A] – [sanctioning authority]

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of $750k including risk margin of $125K
(b) NOTE that Nancy Concemi is the Project Sponsor and Fran Mangano is the portfolio lead
(c) NOTE that Marty Gately is the Project Manager and has the approved financial delegation to deliver the project

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....
Duncan Brown, Acting Head of IS Finance, Global IS

Contact Center Finance

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....
Nancy Concemi, Manager Northboro, Ma. Contact Center

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Information Services
I hereby support the recommendations made in this paper.

Signature..... Date.....
[Doug Chapman, Vice President, ED&G]

Decision of the Sanctioning Authority
I hereby approve the recommendations made in this paper.

Signature..... Date.....
John Pettigrew, Executive V.P. Distribution

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1. **Background:** The Contact Center recording application has been in use in the Northboro and Syracuse Contact Center for several years. Over the years each of the sites has fallen out of the vendor supported version of the application along with our centers being on different application versions. The hardware that the application and recordings reside on is outdated and difficult to maintain. The applications are problematic and are in great need of updating.

2. **Drivers:**

   - Need to abide by Regulatory (PUC/PSC) requirements to record all Emergency contacts with NG
   - Bargaining Unit contracts also oblige NG to perform 2-4 Quality reviews per month with each Customer Service Representative (CSR) to determine performance levels as well as provide additional training.
   - The primary driver of this project is reliability and environment.
   - Current software versions are on the verge of no longer being supported; hence the need to move to a supported version
   - The hardware is also out dated which have led to frequent down time and longer repair time.
   - Storage has been exceeded from the original configuration:
     - Existing recordings must be prematurely manually purged to allow for more current recordings
   -

3. **Project Description:**

   - The project will deliver reliability and up to date application vendor versions built on and state of the arts hardware. This will be accomplished by using both NGRID and Vendor resources. NGRID will purchase all hardware and install at various location.
   - The contracted vendor (Verint) will be on site and will install the most current software available on the market.
   - The new application software will give the NGRID user more functionality. The transition to a common recording platform across the Contact Center s will support future physical consolidation and consistency for delivering Quality Assurance.

4. **Confidential:** This project is in the IS Investment plan and is not linked to other strategic initiatives. The project cost includes the negotiated cost for upgrade from said vendor Verint.

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5. Options Analysis

Option	Recommendation	Rationale
[Provide a brief description of each of the key options considered]	[rejected or recommended]	[explain why this option is rejected or recommended
Do Nothing:	Reject	Due to the age and unsupported version of the application doing nothing would leave the business with a system that is unreliable and unsupported.
Defer project:	Reject	Due to the age and unsupported version of the application doing nothing would leave the business with a system that is unreliable and unsupported.
Upgrade	Recommended	Upgrading the application would give the business a supported version of the application residing on reliable hardware.

6. Milestones

Key Milestones	Date	Responsible person...
Start Completion Project Closure	04/2008 07/2008 08/2009	

7. Safety, Environmental and Planning Issues. N/A

8. Investment Recovery

8.1 Investment Classification

LOW: NGRID is mandated by Regulators to record calls

Asset Replacement is a need here as well – due to the aging hardware infrastructure

8.2 Regulatory Implications

This solution has enables NGRID to satisfy PUC/PSC mandates.

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8.3 Customer Impact.

There will be no impact on our external customer but some training will be required by our internal customers in order to exercise new functionality.

9. Financial Impact

9.1 Cost Summary

Due the 'LOW' rating determined from the Project Classification document, this investment proposal seeks funds the full projects, as shown in the table below. This includes funds that will be required for Requirements and Design stages. A further breakdown of these costs is provided in Appendix B.

$k		Yr	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX								
	CAPEX	750K							
IS Investment Plan	OPEX								
	CAPEX	750K							
Variance to plan	OPEX								
	CAPEX								

The costs for this project will be allocated to 88% to Electric and 12% Gas

This project will [increase / decrease] IS ongoing support costs, as detailed in the following table.

[

Support (RTB) costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing Support Costs						
New support costs *	60	62	64	66	68	
Impact on RTB costs (new minus existing)						
Variance to Plan						

New support costs reflects that new Maintenance costs for the new Witness software v7.8; which will continue to be paid for by the business. A reduction has been taken due to the Niagra Falls Contact Center being rolled into the Syracuse Center.

*****$86K is existing software maintenance costs for the three Contact Centers (a) Northboro (b) Syracuse and (c) Niagra Falls for the Witness platform – paid for by Business***

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9.2 Cost Assumptions.

We assume that the negotiated cost of Vendors will not change. All hardware cost assumptions will not increase before said purchase.

9.3 Benefits Summary

Benefits	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Improved business productivity						
Better quality of service						
Better external customer satifaction.						

9.4 NPV

The NPV for this project is ($549K). The TCO log is attached in Appendix C, and includes assumptions.

9.5 Additional Impacts

10. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Vendor Cost for Licensing Maintenance may increase due to the uncertaintity of the total # of licenses required for each Contact Center	Signed contract	$15K - $30K	Procurement

11. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of $750K, with a completion date of [08/01/2008]

(ii) Note the appointment of Nancy Concemi Director, NorthBoro Contact Center as the Project Sponsor and Martin Gately Project Manager for the project deliverables.

Signature..... Date.....
[Project sponsor and title]

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12. Appendices

A. Resources

IS resource requirements: Project Manager

- **IS DBA**
- **IS Network analyst**
- **IS Desktop**
- **IS Network**
- **IS Server**

Cost for this resources are calculated in the internal IS costs.
Business resource requirement: Business Analyst (1) support/testing

B. Financial Impact – breakdown

The Total Project costs shown in the table below are indicative at this stage.

Project Costs $k	2008/09 Year 1	2009/10 Year 2	2010/11 Year 3	2011/12 Year 4	2012/13 Year 5	Total
Requirements & Design - OPEX						
Requirements & Design - CAPEX	78					78
Requirements & Design – risk margin	16					16
Requirements & Design SUBTOTAL	**94**					**94**
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS	72					72
Internal resource – business						
External resource	73					73
Hardware	402					402
Software						
Other						
Risk Margin	109					109
Development & Implementation SUBTOTAL	**656**					**656**
TOTAL PROJECT COSTS	**750**					**750**
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

C. TCO log

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Economic Governance Model - Summary

Business Case	
Initiative ID	INVP 1255
Initiative Name	Call Recording Equipment Replac
Functional Team	ED&G
Sub Team Team	Customer & Markets
Owner	Nancy Concemi

Economic measures	
NPV 10 Years	($49)
IRR 10 Years	#NUM!
Simple Payback in Years	11
Total O&M	$0
Total Capital Investment	$750
Total Savings	$0

Income Statement

Fiscal	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10
Savings/Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Expense:										
Project O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation	($77)	($154)	($154)	($154)	($154)	($79)	($4)	($4)	($4)	($4)
Total Expense	($77)	($154)	($154)	($154)	($154)	($79)	($4)	($4)	($4)	($4)
EBT	($77)	($154)	($154)	($154)	($154)	($79)	($4)	($4)	($4)	($4)
Total Taxes	($31)	($62)	($62)	($62)	($62)	($32)	($2)	($2)	($2)	($2)
Earnings after Tax	($46)	($93)	($93)	($93)	($93)	($48)	($3)	($3)	($3)	($3)

Cash Flow

Fiscal	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10
Net Cash Flow	($813)	$100	$61	$38	$37	$20	$2	$2	$2	$2
Cumulative Cash Flow	($813)	($714)	($653)	($615)	($578)	($557)	($555)	($553)	($551)	($548)

(INVP1255)
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Ref. No. INVP 1367A

OPEX IS Investment Proposal – Summary
Hyperion Infrastructure and Hyperion Enterprise Software Upgrade to 6.5.1
Shared Services, Finance & Corporate Project No. ISO/88013-R5
(A project sanction paper by Kim Ward for Melissa Sellars – 30th September 2009)

Description

This investment paper seeks sanction for the total costs of the project for £190k (Inc £20 Risk & 5% Uplift). This equates to £48k for the Requirement & design stage of the project, plus £142k for Development & Implementation stage.

Following the Hyperion review that was completed in April 2009, where consideration was given to the current infrastructure, application and support arrangements, it was identified that the infrastructure was broadly in excess of 11 years old and was incurring aged hardware premium costs. The existing version of Hyperion Enterprise required upgrading to 6.5.1.and the current support arrangement was reliant on individuals for both application and Infrastructure.

At the time of presenting this paper, the project is aware that there is a corporate initiative to consider longer term requirements, for financial reporting and the US Back Office consolidation. However, it has been agreed with the Business Stakeholder that this project is an enabler to the strategic initiatives, as it removes immediate issues related to Aged Infrastructure and Application Support.

Category: Policy Driven

Risk score: 39, Primary Driver – Reliability

Project Classification: Low Region: UK

Finance

Sanction Cost £190k

Cost volatility: P20 cost: n/a P80 cost: n/a

Probability that project cost will exceed tolerance n/a

Project included in approved Business Plan? INVP 1367A

Project cost relative to approved Business Plan - 0.45%

If cost > approved B Plan how will this be funded? Not applicable

Other financial issues: Not applicable

	Current planning horizon								
£'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6+	Total	Lower Range P20	Upper Range P80
Proposed Investment	190						190		

Resources

Availability of internal resources to deliver project: Green

Availability of external resources to deliver project: Green

Operational impact on network system: Not Applicable

- **Key issues**
- Delivery of the solution may clash with Financial Business Cycle
- Timescales may need modification based on other projects
- Project needs to align to the wider Financial review for National Grid

Confidential

Ref. No. INVP 1367A

Key milestones

- Project Start September 2009
- Completion November 2009
- Project closure December 2009

Climate change

Contribution to National Grid's 2050 80% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- June 2009 Feasibility Analysis paper noted at PRM

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of £190k (including risk margin of £20k) by 8th December 2009

(b) NOTE that Melissa Sellars is the Project Sponsor

(c) NOTE that Kim Ward is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

Melissa Sellars, Corporate Management Reporting Manager

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Ruth Sullivan, Acting head of Finance, Shared Services & Corporate Line of Business

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

Ken Daly, Vice President Finance Controller

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Ref. No. INVP 1367A

OPEX IS Investment Proposal – Summary

Hyperion Infrastructure and Hyperion Enterprise Software Upgrade to 6.5.1 – INVP1367A

Shared Services, Finance & Corporate Project No. ISO/88013-R5

A project sanction paper by Kim Ward for Melissa Sellars – 30th September 2009

1. Background

Hyperion is operational throughout the year. It is the group's consolidation software that is used for creating the Actual, Budget, Forecast and Plan financial results. The heaviest periods of use for actual results occur between working days 4 to 12 of each month. The Budget and Plan are generally produced between December and March. Forecasts are created in July, October and January.

National Grid Corporate Business have a requirement to upgrade the current version of Hyperion Enterprise from its current version (6.4) to Enterprise version 6.5.1, to resolve some known errors and gain improved functionality.

A review in April 2009 conducted an analysis of the existing infrastructure, where it was established that the current service is located upon servers that are End of Service Life (EOSL) or about to come to the end of EOSL and as such, had no hardware or software support from the vendors in all aspects, including Operating system and Application level software.
To address this and to provide the Business with Hyperion Enterprise on a fully supported operating model this project to upgrade the host Infrastructure and software from 6.4.0. to the latest version 6.5.1.

2. Driver

Hyperion is currently used for consolidating data for the UK Transmission and Distribution Executive and for consolidating data sent to the corporate centre for group consolidation and for management account reporting by the operating units.

Hyperion is used for actual and forecast data at each month end and at periods throughout the year for Business Plan and budgeting purposes.

In addition the system is the main source of data for the year end statutory and regulatory accounts for NGC and is instrumental in the PWC audit process.

Following a review it is noted that the current system is running significantly aged infrastructure, the current version of Citrix used is out of support.

Hyperion is a critical part of National Grids finance reporting system – should it fail there is a major control, financial and commercial risk. Therefore, providing a reliable, stable and fully IS Supported product is essential.

3. Project Description

The project will deliver upgraded Software known as Hyperion Enterprise from 6.4 to 6.5.1. Plus, to accommodate the latest version of Hyperion Enterprise the Hyperion Infrastructure (both Operating and Application) will also be upgraded, to provide improved system stability and reliability during normal and peak time use at the following locations: Basingstoke, Rotherham, Grain, Solihull, Strand and Warwick
The Hyperion infrastructure and configuration will be built to comply with National Grid standards and strategies to ensure full IS support and Service Level Agreements to mitigate future unsupported issues.

4. Business Issues

Timing of the upgrade will need to be carefully co-ordinated so as not to impact daily operational activities and availability of Business Subject matter expert.

Current version of 6.4 has known errors that the upgraded version on 6.5.1 will eradicate and improve current reporting capabilities.

To implement an enduring agreed support model with clear lines of responsibility between the business and IS.

5. Options Analysis

Option	Recommendation	Rationale
New Infrastructure built with old version of Hyperion known as 6.4.1	Rejected	Potential Compatibility issues
Do Nothing:	Rejected	Citrix Servers unreliable and service unsupported
Build new infrastructure with Hyperion Financial management (known as Oracle's HFM) installed	Rejected	Hyperion Financial Management seen as too expensive option at this time. There are several financial reviews being undertaken currently, for the strategic direction of all Global Reporting requirements. Corporate Business however, have immediate support & reliability issues that needs addressing ahead of the Strategic product decision. The latest version of Enterprise 6.5.1 resolves current issues
Defer project:	Rejected	Reliability and support required
New infrastructure with 6.5.1. Installed at Onset	Recommended	Provides Business with reliable fully supported system and latest version of Hyperion Enterprise Software.
Build New Hyperion on a Virtual Server infrastructure	Rejected	Too expensive to be considered. Virtual Servers seen as a more Strategic vision.

6. Milestones

Key Milestones	Date	Responsible person...
Project Start	Sept 2009	CSC PM
Completion	Nov 2009	NGIS PM
Project Closure	Dec 2009	NGIS PM

7. Safety, Environmental and Planning Issues

Not Applicable

Investment Recovery

8. Investment Classification

Policy Driven

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Ref. No. INVP 1367A

9. Regulatory Implications

Not Applicable

10. Customer Impact

Not Applicable

Financial Impact

11. Cost Summary

This investment proposal seeks funds for the full project, as shown in the table below. This includes funds already sanctioned for the Requirements and Design stage. A further breakdown of these costs is provided in Appendix B.

£'000s		Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6 +	Total	Lower Range P20	Upper Range P20
Project Cost	Opex									
	Capex	190						190		
IS Investment Plan	Opex									
	Capex	350						350		
Variance to plan	Opex									
	Capex	160						160		

The cost of this project is **Business funded** and has a 5% uplift. This project will be 100% funded by Shared Services - Corporate.

This project will decrease IS ongoing support costs, as detailed in the following table.

RTB costs £'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Total
Current Annual RTB costs	102	102	102	102	102	510
New Annual RTB costs	81	81	81	81	81	405
Impact on RTB costs (new minus existing)	(21)	(21)	(21)	(21)	(21)	(105)
Variance to Plan	(21)	(21)	(21)	(21)	(21)	(105)

12. Cost Assumptions

NG Standard IS Rates

13. Benefits Summary

a. Mitigation of risk of losing NG financial consolidation system.
b. Resolving known errors from Hyperion Enterprise version 6.4.1.
c. Reduction in RTB costs.

14. NPV

Not applicable

15. Additional Impacts

Not applicable

16. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....

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No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	National Grid Resources required for the project testing may be required for financial daily business activities	New infrastructure would need to be run in parallel, until cutover could be accommodated for several weeks	£20k	IS PM

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Appendices

A. Resources

Step 1:

Role	National Grid Resources (FTEs)		External Resources (FTEs)			
	IS	Business	Contractor	Systems Integrator	ODC	Other
Program Managers (PgM)						
Project Managers (PM)					1	
Business Analysts (BA)					1	
Application Developer (AD)						
Enterprise Architects (EA)	1			1		
Planner (Plan)						
Database Administrator (DBA)				1		
Oracle / Hyperion Consultant			1			
Business SME		2				

The following resources are NOT included in the project costs:
Not applicable

Step 2:

External Resource Engagement:
ODC work packs with TCS due to existing system and Business knowledge
CSC Required to Build Infrastructure engaged to work via PO

Step 3:

Name	Role*	Source**	FTE	Start	End	Availability***
Kim Ward/ Dushyant Singh	PM	Ext	0.25	Sept 09	Nov 09	Confirmed
Nitish Mahajan	BA/SA	Ext	1	Sept 09	Nov 09	Confirmed
Danny Ensell	EA	Ext	0.25	Sept 09	Nov 09	Confirmed
Ranvir Kaila	SME	Bus	1	Sept 09	Nov 09	TBC
Steve Slack	SME	Bus	0.25	Sept 09	Nov 09	TBC

** Role: Use role abbreviations identified within Stage 1.*
*** Source: IS=National Grid IS FTE; Bus=National Grid Business FTE; Ext=External FTE*
**** Only enter Confirmed if approved by the relevant Portfolio Lead, otherwise enter TBC (to be confirmed)*

Step 4:

Resource Phasing related comments:

Not applicable

TCO Log

The Total Project costs shown in the table below are indicative at this stage.

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TOTAL COST LOG OF IS INVESTMENT - FINANCIAL SUMMARY

Investment Name:	Hyperion Upgrade
Project Name:	Hyperion Infrastructure and Hyperion Enterprise Software Upgrade to 6.5.1
Investment Plan No:	INVP1367
Investment Start (Financial Year):	09/10
Currency used:	UK £

	09/10 £'000s	10/11 £'000s	11/12 £'000s	12/13 £'000s	13/14 £'000s	14/15 £'000s	15/16 £'000s	Total £'000s
INVESTMENT PLAN DETAILS:								
OPEX	350							350
CAPEX								
Net RTB Impact								
INVESTMENT COST SUMMARY								
Start-Up - Opex								
Start-Up - Capex	20							20
Start-Up - Risk Margin								
Start-Up - Subtotal	20							20
Requirements and Design - Opex	28							28
Requirements and Design - Capex								
Requirements and Design - Risk Margin								
Requirements and Design - Subtotal	28							28
Development and Implementation - Opex								
People	55							55
Software								
Hardware	57							57
Telecommunications								
Service Contracts								
Other								
Risk Margin	20							20
Development and Implementation - Capex								
People								
Software								
Hardware								
Telecommunications								
Service Contracts								
Other								
Risk Margin								
Development and Implementation - Subtotal	142							142
Total Investment Costs - Opex	170							170
Total Investment Costs - Capex								
Total Investment Costs	190							190
Non-Regulated Project - Uplift								
Non-Regulated Project - Total	190							190
Future Investments								
VARIANCES TO INVESTMENT PLAN:								
OPEX	180							180
CAPEX								
RTB								
Current Annual RTB Expenditure	102	102	102	102	102			510
New Annual RTB Expenditure	81	81	81	81	81			405
Net RTB Impact	(21)	(21)	(21)	(21)	(21)			(105)
Variance to Investment Plan	(21)	(21)	(21)	(21)	(21)			(105)
BENEFITS ANALYSIS:								
Investment Benefits								

NPV/NPC SUMMARY INFORMATION

Discount Rate:	15%	NPV:	(108)	IRR:	-23%	VCR:	0.82
Payback Period:		5	Years		Months		

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CAPEX IS Investment Proposal – Summary
US Wintel Server Life Cycle - INVP 1391
IS-CTO, Shared, Project Number-K154CS

A project sanction paper by David Davis on behalf of Chris Murphy, 2nd Sept, 2008

Description

Over 1500 Wintel Operating System Instances on 900 physical servers support various business applications/systems at National Grid US. These servers have a 4 year warranty that is purchased upfront from the vendor to reduce the ongoing operating costs and also to align with the four year refresh cycle (inline with the National Grid IS strategy)

By the end of this financial year approximately **375** Wintel servers (**40%** of the Wintel estate) would be aged over 48 months and would attract **$225k OPEX** if warranties were extended to avert risk as opposed to refreshing the asset. Also reliance on unsupported infrastructure would be a potential risk to the stability of the applications/systems and hence to the business.

National Grid IS intends to refresh **227** servers (25% of the Wintel estate) as a part of this initiative, while extend the warranty of 148 servers for a year to align with lifecycle timelines of the business applications.

During the refresh, the strategy is to adopt virtualisation and consolidation tools and technologies to benefit from better, capable and powerful hardware. This will reduce the overall server footprint and leverage on technology features such as dynamic scaling to provide quicker and enhanced services to the end users and projects. It is estimated that adoption of this strategy will realise in reduction of server footprint by 82% (41 as apposed to 227), resulting in savings/cost avoidance associated with reduced data centre facility[1] use and also reduces the refresh costs by **55%** (like for like replacement estimated at $1.8m). This approach enables reduced capital investments for future requirements (estimated at $3k per server associated with network and storage port provisioning) and progressively drives down the overall TCO, turn around times and future refresh costs.

This paper seeks sanction of **$1000k** (inclusive of $140k risk margin) for the delivery[2] of refresh of the aged Wintel Servers (227 No) inline the strategic approach based on virtualisation and consolidation. The scope of this project will be to:

- Engage the vendor (DELL) for timely provisioning of the server infrastructure (with 4 years maintenance warranty)
- Procure software tools to assist in the migration of application and file servers to physical and virtual environments ($35k for SecureCopy, $70k for Platespin)
- Stakeholder (application owners/Business) communication and management for approvals for outages/replacements
- Installation, commissioning of the new Wintel infrastructure
- Migration of the application to the new virtualised environment (as applicable – 192 to 6)
- Like for Like replacements where applicable (35 servers)
- Decommissioning of the aged/replaced Wintel infrastructure

The project will be delivered using the Solution Delivery Process model and this refresh cycle is expected to be completed by 10th Apr 09 (24th Apr 09 with two weeks contingency period).

Category: Policy-driven

Risk score: **36**

Primary Drivers: Policy, Risk mitigation

Project Classification: Medium

[1] The data centre facilities cost / sq ft is $1300 (information source - National Grid Data Centre team)

[2] The design and architecture will be inline with the design/architectural specifications developed for server asset refresh.

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Region: US

Finance

Sanction Cost	**$1000k (inclusive of $140k risk margin)**
Project included in approved Business Plan?	INVP1391 ($1200k budgeted)
Project cost relative to approved Business Plan	83%

Cost apportioning will be as follows: 50% to National Grid US and 50% to Keyspan. Server profile matrix for cost apportioning will be used when available to allocate the costs to the respective lines of business within National Grid US and Keyspan

Resources

Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	Neutral

Key issues

- Approximately 375 Wintel servers have aged 4 years or greater and by end of the financial year will go out of warranty/support
- Continued reliance on unsupported systems a potential risk to the stability of the applications/systems that support business processes
- Extending warranty would cost National Grid approximately $225k OPEX.

Key milestones

- PRM/GTG submission – 22nd Aug 08
- GTG approval – 29th Aug 08
- PRM approval – 02nd Sept 08
- Paper signed by the project sponsor – 17th Sept 08
- Project start date – 22nd Sept 08
- Purchase Order to the vendor/s – 22nd Sept 08
- Hardware delivery – 03rd Oct 08
- Installation of the infrastructure in the US start – 06th Oct 08
- Installation of the infrastructure in the US complete – 31st Oct 08
- Start of the migration activities – 03rd Nov 08
- Completion of the migration activities – 10th April 09
- Project end date – 10th April 09
- Project contingency end date – 24th April 09

Climate change

Contribution to National Grid's 2050 80% emissions reduction target:	80% reduction in server footprint

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Impact on adaptability of network for future climate change:	Positive
Are financial incentives (e.g. carbon credits) available?	No

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Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of **$1000k** (including risk margin of **$140k**) by 02nd Sept 08

(b) NOTE that Chris Murphy, Vice President, Enterprise Operations Global IS, is the Project Sponsor

(c) NOTE that Joanne Engle is the Project Manager and has the approved financial delegation to deliver the project

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Chris Murphy, Vice President Enterprise Operations Global IS

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

Brian Kelly, Department Head, IS Services & Operations, Global IS

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CAPEX IS Investment Proposal – Summary
US Wintel Server Life Cycle
IS-CTO, Shared, Project Number-K154CS

A project sanction paper by David Davis on behalf of Chris Murphy, 2nd Sept, 2008

1. Background

National Grid has implemented various business applications and essential infrastructure services to support its business operations. These implementations have grown organically over a period of time and the dependency on IT has become obvious for smooth business operations. Hence the availability of the IT systems and associated business services becomes imperative in maintaining the reputation within the utility industry.

National Grid IS has developed strategies surrounding the refresh of these infrastructures supporting the business. In the US policy is to refresh the assets every 4 years while in the UK it's every 5 years. This ensures that the infrastructures continue to have vendor support and avoid any risk to the business due to non-availability of support which may impact the availability of the business applications hosted on these infrastructures. In addition aged assets attract premium (additional support costs) to maintain particularly in the UK operating model.

Recent technological developments have resulted in more powerful and capable systems being available in the market and the technologies supporting consolidation through virtualisation and partitioning has pawed way to have fewer systems to support applications with no impact to the performance. National Grid IS have developed strategies aimed to exploit virtualisation/partitioning as often as possible by stacking multiple instances on a single hardware. National Grid intends to align the refresh initiatives with the strategic approach which will enable reduction of server footprint there by the overall TCO.

This paper intends to perform refresh of the Wintel servers which would reach End of Life this financial year and consolidate where possible. From the inventory it is known that 375 Physical Wintel Servers will reach end of life this financial year and the intention is to address 227 servers as a part of this refresh initiative while extend the warranty for 148 servers for a year to align with lifecycle timelines of the business applications.

At the end of this project, 35% reduction in the server footprint will be achieved and also lower the TCO associated with avoided hardware warranty extension, reduced use of data centre facilities and reduced software maintenance. This approach is 55% economical as compared to the traditional like for like replacement (estimated at $1.8m) and also aligns with the organisations wish to reduce the carbon footprint.

This paper seeks sanction of $1000k (inclusive of $140k risk margin) for the delivery of refresh of the aged Wintel Servers (227 No) inline the strategic approach based on virtualisation and consolidation. The scope of this project will be to:

- Engage the vendor (DELL) for timely provisioning of the server infrastructure with 4 years maintenance warranty
- Procure 2 software tools to assist in the migration of application and file servers to physical and virtual environments ($35k for SecureCopy, $70k for Platespin)
- Stakeholder (application owners/Business) communication and management for approvals for outages/replacements
- Installation and commissioning of the new Wintel infrastructure
- Migration of the application to the new virtualized environment (as applicable – 192 to 6)
- Like for Like replacements where applicable (35 servers)
- Decommissioning of the aged/replaced Wintel infrastructure

The project will be delivered using the Solution Delivery Process model and this refresh cycle is expected to be completed by 10th Apr 09 (24th Apr 09 with two weeks contingency period).

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2. Investment Drivers and Business Issues

- Approximately 375 Wintel Infrastructure have aged to 4 years or greater and by end of the financial year will go out of warranty/support
- Continued reliance on unsupported systems a potential risk to the stability of the applications/systems that support business processes
- Extending warranty would cost National Grid approximately $225k OPEX
- Reduced carbon foot print through consolidation and virtualisation, supporting the company direction on environmental conservation and reduced pressure on data centre facilities (cooling, power etc)
- Supports Data centre rationalisation and consolidation initiatives
- Provisioning of data centre facilities for new initiatives at no additional capital investments

3. Assumptions

- There will be no change to the application functionality and the procedures for managing the applications
- The IS operations team involved (Wintel) in the project will be able to dedicate 60% of the time for life cycle activities
- The vendor delivery timescales for the hardware is 10 working days
- The number of Operating System Instances will remain the same though the number of server hardware is reduced.

4. Project Description

The objective of this project is to refresh the aged Wintel infrastructure and in the process reduce the overall server footprint (by 80%) and reduce the overall TCO by means of virtualisation.

Solution delivery process model will be adopted for the delivery of this project. The project will align with the IS refresh strategy which aims at use of virtualisation and consolidation technologies/procedures

The activities involved in the delivery phase are:

- Engaging the vendor for timely provisioning of the Wintel Infrastructure (estimated purchase is 41 physical servers)
- Stakeholder communication and engagement for timely approval of the outages/refresh
- Engaging the application owners/users for light touch testing activities
- Installation and commissioning of the new Wintel infrastructure (inline with the standard build procedures)
- Development of a migration plan and timescales
- Migration of the application from physical Wintel servers to the virtualised environments (from 192 physical servers to 6 physical servers)
- Like-for-Like replacements where ever virtualisation and consolidation is deemed not possible or risky (estimated 35 servers)

The project is expected to be completed by 10th April 09.

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5. Options Analysis

Option	Recommendation	Rationale
Do Nothing:	Not Recommended	This option is not recommended as it would not be inline with the National Grid refresh policy (to refresh servers aged over 4 years). Moreover failure to refresh will incur additional costs of approximately $136k towards warranty extension (227 servers) and also may risk stability of the application/business system.
Defer project:	Not Recommended	This option is not recommended due to the same reasons as mentioned for 'Do nothing' option.
Refresh by adopting a like for like replacement approach	Not Recommended	This option is not recommended as the cost for like for like replacement would be significantly higher (by over 50%) than the alternate strategy adopted (virtualisation and consolidation). Also this strategy will not support the company direction on environmental conservation and presents additional costs to the data centres facilities
Refresh by adopting a strategy that's based on virtualisation and consolidation	Recommended	This option is recommended as the cost would be 50% less as compared to like for like replacement (estimated at $1.8m) and also reduces the overall TCO and future refresh costs. This approach supports the organisation initiatives to reduce the overall carbon footprint.

6. Milestones

Key Milestones	Date	Responsible person...
PRM submission	22nd Aug 08	Joanne Engle – National Grid IS Project Manager
GTG Approval	29th Aug 08	Joanne Engle – National Grid IS Project Manager
PRM approval	02nd Sept 08	Joanne Engle – National Grid IS Project Manager
GISSC approval	w/c 8th Sept 08	Joanne Engle – National Grid IS Project Manager
Paper signed by Project Sponsor	17th Sept 08	Joanne Engle – National Grid IS Project Manager
Project Start date	22nd Sept 08	Joanne Engle – National Grid IS Project Manager
Vendor Engagement	22nd Sept 08	Joanne Engle – National Grid IS Project Manager
Hardware Delivery	03rd Oct 08	Joanne Engle – National Grid IS Project Manager
Start of installation and commissioning activities	06th Oct 08	Joanne Engle – National Grid IS Project Manager
Completion of the installation and commissioning activities	31st Oct 08	Joanne Engle – National Grid IS Project Manager

Key Milestones	Date	Responsible person...
Start of the migration activities	03rd Nov 08	Joanne Engle – National Grid IS Project Manager
Completion of the migration activities	10th April 09	Joanne Engle – National Grid IS Project Manager
Project End date	10th April 09	Joanne Engle – National Grid IS Project Manager
Contingency End date	24th April 09	Joanne Engle – National Grid IS Project Manager

7. Safety, Environmental and Planning Issues

There are no issues identified

8. Investment Recovery

8.1 Investment Classification

This investment proposal is policy driven and addresses the refresh of aged assets (aged over 4+ years). This investment will mitigate the risk of reliance by the business on unsupported hardware/infrastructure.

8.2 Regulatory Implications

This project does not have direct implication on the regulatory requirements but may have indirect impacts associated with the availability of the in-scope systems

8.3 Customer Impact

There will be very minimal impact to the customer (associated with non-availability of the system during outages/refresh/migration). However it is expected that the performance of the systems will improve on account of moving towards more capable and powerful infrastructure.

9. Financial Impact

9.1 Cost Summary

The following table provides the full costs for the delivery of the project. A detailed breakdown is provided in Appendix B.

$k		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX								
	CAPEX	1000					1000		
IS Investment Plan (INVP1391)	OPEX								
	CAPEX	1200					1200		
Variance to plan	OPEX								
	CAPEX	200					200		

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Cost apportioning will be as illustrated below:
50% to National Grid US and 50% to Keyspan, Server profile matrix for cost apportioning will be used when available to allocate the costs to the respective lines of business within National Grid US and Keyspan

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Note:

This is an asset refresh project and will have no impact to the ongoing RTB.

Support (RTB) costs $k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Software costs	151	151	151	151	151	755
Tax (8%)	12	12	12	12	12	60
Current support costs (227 servers)	**163**	**163**	**163**	**163**	**163**	**815**
Hardware maintenance	0	0	0	0	0	0
Software Costs	151	151	151	151	151	755
Tax	12	12	12	12	12	60
New Support costs (41 servers)		**163**	**163**	**163**	**163**	**815**
Impact on RTB costs (new minus existing)	**0**	**0**	**0**	**0**	**0**	**0**
Variance to Plan	**0**	**0**	**0**	**0**	**0**	**0**

Note:

- The Wintel hardware procured comes with 4 years of warranty and hence there is no additional maintenance cost associated with the hardware
- It's assumed that there will be no change to the existing support model and the number of resources as the number of operating environments supported will remain the same.

9.2 Cost Assumptions

- The costs of the virtual server will be $23k (not $35k – achieved by reutilisation of the software licenses previously procured)
- 2 TB of additional swing space (storage space required for migration) would be sufficient for all the migration activities
- It is assumed that the light touch application testing will be performed by the application support at no additional costs as the testing requirements will be less than 1 day effort/ application

9.3 Benefits Summary

Benefits ($k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Avoided Warranty costs	0	136	136	136	136	544
Cost savings due to reduced use of data centre facilities	0	62	62	62	62	248
Reduced Capital investment (due to virtualisation and consolidation strategy)	525	0	0	0	0	525
Avoided capital investment due to availability of network ports and storage ports for new projects	0	561	0	0	0	561
Total	525	759	198	198	198	1317

Note:

- Refresh of 227 servers will avoid the need to extend the warranty for these servers and hence will avoid $136k of OPEX costs ($600 X 227 = $136,200)
- The cost of data centre facilities for 227 servers will be $93,600 (6 rack space @ $1300/pcm per sft)
- The cost of data centre facilities for 41 servers will be $31,200 (2 rack space @ 1300/pcm per sft), hence a net saving of $62,400 pa
- The approach of using virtualisation and consolidation techniques as compared to the strategy of like for like replacement reduces the number of servers that is required to be procured. In this instance only 41 servers are procured instead of 227 hence the costs saving of $525k

- It enables provisioning of network and storage ports to 187 servers at no additional capital investment savings of around $561k (estimates are $3k/server is required for provisioning storage and network ports)

9.4 NPV

This essential asset refresh project presents itself as a NPV project with $531k due to the virtualisation and consolidation strategy adopted.

9.5 Additional Impacts

None identified at this point in time.

10. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	There is a risk that the license costs for Virtual Servers will be more than $23k / license and the licenses from the previous year cannot be leveraged on	National Grid IS Manager / Wintel Technical lead will discuss with Microsoft to ensure that the licenses can be re-utilised	$72k	National Grid IS Project Manager
2	Delay in getting the resources on board will impact the completion of the project	National Grid IS manager will work with the Technical lead to identify the resources and engage them immediately at the start of the project	$35k (to accommodate two weeks delay)	National Grid IS Project Manager
3	Delay in getting approval from the business/application support users may lead to delay in completion of the project	National Grid IS Manager/Technical lead will engage the Lines of Business/application owners to get approval in advance and plan accordingly.	$17k (to accommodate one weeks delay)	National Grid IS Project Manager
4	There may be some applications which require more time for migration than the standard applications, hence resulting in slippage to the project timescales and hence the costs	National Grid IS has carried out similar migrations in the past and would leverage on the learning's, however an extended analysis will be performed to mitigate the risk. Re-planning exercise will be conducted to accommodate any changes to the timescales	$35k (to accommodate two weeks delay)	National Grid IS project Manager

11. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of $1000k including a maximum risk range of $140k with a completion date of 04/10/2009.

(ii) Note the appointment of Chris Murphy as Project Sponsor and Joanne Engle, as Project Manager for the project deliverables.

Signature..... Date.....

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Attachment C1 to DKS-11

Brian Kelly, Department Head, IS Services and Operations, Global IS

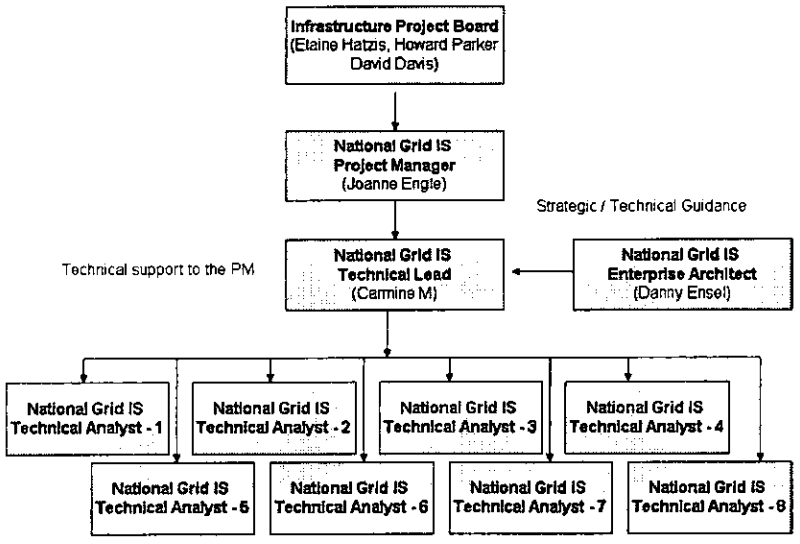
12. Appendices

A. Resources

Role Description	To	Name
National Grid Project Manager	Provide Project management support, coordination with the vendor	Joanne Engle
National Grid Programme Manager	To provide programme management support and visibility of the project to the senior management	Howard Parker
National Grid Wintel Manager	To provide strategic	David Davis
National Grid Technical Lead	To provide technical support to the project manager and to liaise with the technical analysts (on a day to day basis) for delivery of the project	Carmin Mileo
National Grid Enterprise Architect	To validate the solution and provide technical/strategic guidance	Danny Ensell
National Grid Technical Analysts	To implement the solution	8 Technical Analysts will be engaged for this project

B. Project Structure:

Below is the project structure that has been established to deliver this project



Technical Analyst to deliver the technical components

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C. Financial Impact – breakdown

The Total Project costs shown in the table below are indicative at this stage.

Pilot Project Costs $k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Requirements & Design - OPEX						
Requirements & Design - CAPEX						
R&D SUBTOTAL						
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Warranty Extension						
Risk Margin						
Total						
Development & Implementation – CAPEX						
National Grid – IS resource	430					430
Hardware	325					325
Software	105					105
Risk Margin	140					430
D&I SUBTOTAL						
TOTAL PROJECT COSTS	1000					1000
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

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D. TCO log

Date Last updated: 21st Aug 2008 — Year 0 is financial year: 2008-2009

TOTAL COST LOG FOR IS INVESTMENTS

Enter system name:

US - Wintel Server life cycle

Enter Scheme No: ISCAP0823

K154CS

LIFECYCLE COST SUMMARY

	Previous Cumulative $000s	Year 0 $000s	Year 1 $000s	Year 2 $000s	Year 3 $000s	Year 4 $000s	Year 5 $000s	Year 6 $000s	Total $000s	
									-	+
Current Annual Support Costs		163	163	163	163	163	163	-	978	+
Previous Investments									-	+
This investment OPEX		-	-	-	-	-	-		-	
This investment CAPEX		1,000	-	-	-	-	-		1,000	
This Investment TOTAL		1,000	-	-	-	-	-		1,000	+
Future Investments			-	-	-	-	-	-	-	+
TOTAL COST	-	1,163	163	163	163	163	163	-	1,979	=

INCREMENTAL SUPPORT COST OF THIS INVESTMENT

Net Incremental Support Costs	-	-	-	-	-	-	-	-	-

TCO log - US Wintel Server life cycle Ver 1

National Grid Confidential

Date: October 22nd, 2008

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Case 10-E-0050
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Investment Proposal Summary Sheet
Global Service Management Toolset
INVP 1395/1408

Region: US&UK	Key Driver: NPV	Form of Control: IS-CTO, Shared

Project Description:

This Strategic Ambition project is mandated to implement a global service management toolset which enables common processes across IS and provides the capability to move to a Commodity Operating Model.

The investment proposal seeks to sanction funds for the SDP Start-Up stage of the project. Sanction of the Requirements & Design phase will be sought at the end of the Start-Up stage followed by a third sanction point for Development & Implementation.

The Start-Up stage of the project will deliver:

• Clear objectives and scope for the remainder of the project

-This will include a chosen toolset vendor which will allow the IS Performance and Capacity area to resolve Audit Item No. 0295.

• Initial financial model for costs and benefits

• Agreed approach and costs for the Requirements & Design stage

• High level costs for the remainder of the project

• High level project plan for the remainder of the project

Refer to Appendix C in investment paper for project approach

During Start-Up, all stakeholders will participate in workshops to determine benefits of using the toolset for their processes and agreed resources for the remainder of the project. Ernst and Young has been acquired via the framework agreement to provide professional services in developing a strong comprehensive business case to justify all costs and benefits for the remainder of the project.

Cost and benefit assumptions have not been defined in detail based on the global investment plan versions currently in circulation. The Start-Up stage of this project will focus on refining these estimates early in the plan, providing the opportunity to define the most cost-effective scope and hence to avoid non-value adding expenditure. These benefits will be derived from increased operational efficiency, avoidance of errors, stream lined processes, reduction in FTE's, elimination of redundant tools and opportunistic sourcing. This paper seeks to sanction for delivering this business case.

This investment proposal is for Start-Up.

Key Business Benefits:

Upon completion of the Start-Up portion of this project the clear benefits will be:

- Clear objectives and scope for the remainder of the project
  - This will include a chosen toolset vendor which will allow the IS Performance and Capacity organisation to resolve Audit Item No. 0295.
- Initial financial model for costs and benefits
- Agreed approach and costs for the Requirements and Design Stage
- High level costs for the remainder of the project
- High level project plan for the remainder of the project

Financial Summary:

COSTS $ k out-turn	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL

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	2008/09	2009/10	2010/11	2011/12	2012/13	
Start-Up OPEX						
Start-Up CAPEX	$0.166k					$0.166
Start-Up risk margin	$0.011k					$0.011
Start-Up SUBTOTAL	$0.177k					
Requirements & Design OPEX	0					
Requirements & Design CAPEX	0					
Risk margin						
TOTAL SCHEME COSTS	$0.177k					$0.177
Non-regulated scheme – UPLIFT						
Non-regulated scheme TOTAL COSTS						
Impact on RTB costs	$0k					
TOTAL BENEFITS						

Key risks:
- Resource allocation and conflict with other projects
- Schedules for out of scope projects require SM toolset integration and need coordination through EA during Start-Up timeframe

Key Dates:
Project Start: May 1st, 2008
PRM: October 29th, 2008
Start-Up Completion: December 16th, 2008

Investment Plan No: INVP 1395/1408

Budget (ISIP v9.0) OPEX						
Budget (ISIP v9.0) CAPEX	$.940k	$.750k	$.750k	$.750k	$.750k	$3.940k
Impact on RTB costs (ISIP v9.0)						

Note: This is the proposed investment in the Global Investment Plan. These costs will change after the indicative Cost/Benefit work is completed which is the purpose of this investment paper.

Scheme NPV:	VCR:	IRR:	Payback period:

Sourcing Strategy:

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Date: October 22nd, 2008

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Case 10-E-0050
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RECOMMENDATIONS

The Sanctioning Authority is invited to:-

1. Approve financial sanction of $177k (including a risk margin of $11k), with a completion date of December 16th, 2008
2. Note the appointment of Don Stahlin, VP as Project Sponsor and Harold Pinsker, IS/CTO as Project Manager for the scheme deliverables.
3. I accept the role of Project Sponsor as defined in the Investment Scheme Procedure and will ensure the execution of the programme / project to time and cost.

Signature ..... Date .....

Don Stahlin, V.P. Production Management

SUPPORTING STATEMENTS:

I. FINANCE STATEMENT(S)

I confirm that the financial data supports the business case outlined in this scheme,

Signature ..... Date .....

Duncan Brown, IS Finance, Global IS

DECISION OF THE SANCTIONING AUTHORITY

I hereby approve the recommendations made in this paper.

Signature ..... Date .....

Brian Kelly, IS Services & Operations

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CAPEX IS Investment Proposal – Summary
Executive Board Room Video Conference Facilities Upgrade
Corporate Centre Global IS Project No. [TBC]

(A project sanction paper by Brian Kelly for John Reichelt– 10th Feb 2009)

Description

Video conferencing facilities have been in use at National Grid for over a decade now. These facilities have been used to conduct meetings and workshops limiting the need to travel, thereby enabling reduction in costs associated with international and domestic travel and echoing the organisations commitment towards carbon footprint reduction. However the facilities and the audio/video quality of the existing video conference built on the then available legacy technologies is not comparable to the today's standards and technologies, leading to less than average experience for the users using these facilities and limiting the overall effectiveness.

Growing geographical footprint of the business and the organisation's aggressive drive to reduce unnecessary travel, reduce travel costs and commitment to reduce carbon footprint it is imperative that the usage of video conferencing facilities going forward will be significant. Hence it is necessary to enhance/ install reliable, easy to use video conferencing facilities with capabilities to support the usage across multiple regions and improve the effectiveness through enhanced audio and video quality.

In response IS has established a multi-staged video conference strategy to increase the video conference footprint across the organisation and upgrade where necessary with the state of art video conferencing facilities. Stage I of this strategy currently in progress will deliver video conference facilities to the identified collaboration rooms across US and UK by Mar 09, while this stage i.e. stage II will enhance the Video conference facilities at key executive locations in the US and UK

To achieve the objectives of stage II, National Grid under the existing contract with Cable & Wireless has engaged market experts to develop video conferencing facility design meeting the requirements of the executives and to deliver the design at key executive locations in the US and UK.

This investment proposal seeks a sanction of **£1,124k** (includes a risk of **£102k**) to deliver/enhance the video conferencing facilities at key executive locations inline with the Executive Committee recommendations. The scope will be to:

- Revamp the existing facilities at The Strand and Warwick to align with the developed and agreed design
- Deliver & implement the VC design at The Strand, Warwick and Reservoir woods
- Agree and formalise the contract for enduring support with the vendor

The video conferencing facilities in addition to the collaboration room video conference facilities will be operational at the stated locations by end of Sept 09. It is envisioned that this initiative will reduce the need for trans-Atlantic travel significantly and allow board meetings to be held effectively across UK and US.

The design developed will become the baseline for any provisioning new or revamping existing video conferencing facilities.

Category:	NPV [£38k]	
Risk score:	30	Primary Driver – Safety, Environmental, Cost reduction
Project Classification: Low		Region: UK/US

Finance

Sanction Cost Cost £1,124k (includes risk of £102k)

Project included in approved Business Plan? No. Will be funded by substitution from investment lines 0647, 0585, 1647, 1404 and 1407

Project cost relative to approved Business Plan 100%

The costs will be split as follows : 34% - US geography and 66% to UK geography

Costs will be apportioned to Corporate Centre as follows:-

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£k	Current planning horizon								
	Yr 1 08/09	Yr 2 09/10	Yr 3 10/11	Yr 4 11/12	Yr 5 12/13	Yr 6+	Total	Lower Range P20	Upper Range P80
Proposed Investment		1,124					1,124		

Resources

Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	N/A

Key issues

- The project will have an impact on RTB (£137k pa)this needs to be offset against reduced travel costs
- The meeting arranged for the Board Rooms will have to be re-arranged to allow facilities work to proceed
- Non availability of video conferencing facilities during the revamping stage may result in management teams to engage in transatlantic travel and may cost on air fares and accommodation

Key milestones

- Project Sanction 17th Feb 09
- GISSC Approval 09th Mar 09
- Project Start 16th Mar 09
- Project Complete 27th Sep 09

Climate change

Contribution to National Grid's 2050 80% emissions reduction target:	Positive
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- NA – IS Global Technology Governance Group
- 04th Feb 09 – IS Project Review Meeting
- 17th Feb 09 – National Grid Executive

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of £1,124k including risk margin of £102k by Sept 09

(b) NOTE that Helen Mahy is the Project Sponsor

(c) NOTE that Howard Parker is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

Brian Kelly, Head of ISSO Global IS

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IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

John Reichelt, Acting CIO Global IS and Chair of GISSC

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Case 10-E-0050
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CAPEX IS Investment Proposal – Summary
Executive Board Room Video Conference Facilities Upgrade
Corporate Centre, [Legal Entity], Project No. [xxx]
(A project sanction paper by John Reichelt for Helen Mahy – 10th Feb 2009)

1. Background

The growing geographical footprint of the business and the need to interact with teams based at different geographies has caused a significant increase in international travel for Executives and Managers. This increase in travel brings additional costs in flights and hotel rooms, in-efficient use of time spent travelling and an increased carbon footprint further contributing to global warming.

National Grid has implemented video conferencing facilities at various locations to enable geographically dispersed teams to communicate limiting the need to travel. However these Video conferencing facilities are not comparable with the current technology standards and the audio/video qualities are not good enough for the executives demanding better quality and reliability, leading to less than average experience.

It is obvious that the use of video conferencing facilities will increase significantly in the future as the drive to reduce the travel expenses, reduce non-productive travel time, commitment to reduce carbon footprint are pursued aggressively.

In response IS has established a multi-staged video conference strategy to increase the video conference footprint across the organisation and upgrade where necessary with the state of art video conferencing facilities. Stage I of this strategy currently underway will deliver video conference facilities to the identified collaboration rooms across US and UK by Mar 09, while this stage i.e. stage II will enhance the Video conference facilities at key executive locations in the US and UK

Implementation of the video conference strategy will enable executives and staff to conduct meetings effectively from their base locations.

National Grid to achieve the objectives of stage II has engaged market experts through C&W to develop video conferencing facility design meeting the requirements of the executives and to deliver the design at key executive locations in the US and UK which are The Strand & Warwick in the UK and Reservoir Woods in the US.

This investment proposal seeks an investment of **£1,124k** (includes a risk of **£102k**) to deliver/enhance the video conferencing facilities at key executive locations.

2. Driver

- Current facilities are not good enough to allow quality business meetings to take place without extensive travel. This travel is costly, bad for the environment and, as the business grows, creates unproductive time for travellers
- Creating an environment where executives can meet virtually with good quality pictures and sound will allow the organisation to realise the travel policy, contribute towards carbon reduction targets and increase productive time
- An ergonomically standard and easy to use board room in each location capable of supporting Board meetings spread across multiple regions requiring attendance of up to 15 people in each location with the ability for remote sites to join as required
- To provide dedicated video facilities supporting collaborative working and virtual 'face to face' meetings for small groups

3. Project Description

The overall objective of this project is to deliver the approved design into key executive locations which are The Strand, Warwick and Reservoir Woods.

Engage Cable and Wireless under the existing contract and gain access to current market experts to design a meeting environment with good audio visual facilities in legacy boardrooms that meet the stated requirements of the executive.

The activities that will be performed during the delivery phase are:

- Procure hardware and services for implementation
- Arrange modifications to the dedicated rooms to meet vendor requirements, this will include sound proofing, lighting and heating/cooling
- Change the facilities in Reservoir Woods, The Strand and Warwick to replicate the new agreed video conferencing facilities design
- Arrange for the necessary network infrastructure to be installed and/or modified to accommodate the selected video conferencing solution

The project will be completed in Sept 09.

4. Business Issues

- Face to face meetings are perceived to be the best medium for business meetings and the culture within the organisation needs to change to make persistent travellers think about alternatives to travel.
- Meeting rooms in National Grid are always in high demand. Ensuring that rooms containing video conference facilities are available to those wishing to use them requires a change to the way meeting rooms are booked and the priority of those bookings.
- The increase in annual maintenance charges for support and usage needs to be offset against the reduction in travel expenses. A method of calculating avoided travel needs to be implemented.

5. Options Analysis

Option	Recommendation	Rationale
Do Nothing:	Rejected	Business travel will persist and savings will not be met. Travel policy will not be able to be fully implemented. No contribution will be made to carbon reductions.
Defer project:	Rejected	Business travel will persist and savings will not be met. Travel policy will not be able to be fully implemented. No contribution will be made to carbon reductions.
Partial implementation	Rejected	The current facilities are not suited to good video conferencing meetings and therefore people will still want to travel to either meet face to face or get to the improved facilities.
Full implementation	Recommended	Reduced travel would pay for the project within 3 yrs. (based upon rooms being used for 21 meetings and each meeting saving 8 premium economy Atlantic flights)

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6. Milestones

Key Milestones	Date	Responsible person...
Project Sanction	17/02/2009	John Reichelt
GISSC Approval	09/03/2009	John Reichelt
Project Start	16/03/2009	Howard Parker
Project Complete	27/09/2009	Howard Parker

7. Safety, Environmental and Planning Issues

Access to the facilities will need to be arranged as meetings have been pre-arranged

Investment Recovery

8. Investment Classification

This investment is classified as low impact project.

9. Regulatory Implications

There will be no regulatory implications

10. Customer Impact

There will be access disruptions to the meeting space and video facilities during the project, however on implementation will enable efficient use of time and reduce unnecessary travel.

Financial Impact

11. Cost Summary

The following table show the full costs for the project. A detailed breakdown is provided in Appendix B.

£k		Yr 1 08/09	Yr 2 09/10	Yr 3 10/11	Yr 4 11/12	Yr 5 12/13	Yr 6+	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX									
	CAPEX		1,124					1,124		
IS Investment Plan	OPEX									
	CAPEX									
Variance to plan	OPEX									
	CAPEX		(1,124)					(1,124)		

Note:
The funding will be by substitution
Cost apportioning: The costs will be split as follows: 34% - US geography and 66% to UK geography
In the US cost apportioning will be as follows:

15% to Electric Distribution and Generation and 7% each for Gas Distribution, Business Services, Shared Services, Customer & Markets and Global IS
While in the UK the cost apportioning will be as follows:
21.5% each to Gas distribution and Electricity Transmission and 7% to Business Services.

This project will increase IS ongoing support costs, as detailed in the following table.

Support (RTB) costs £k	Yr 1 08/09	Yr 2 09/10	Yr 3 10/11	Yr 4 11/12	Yr 5 12/13	Total
Existing Support Costs	0	0	0	0	0	0
New support costs (delta increase)	0	0	137	137	137	411
Impact on RTB costs (new minus existing)	**0**	**0**	**137**	**137**	**137**	**411**
Variance to Plan	**0**	**0**	**(137)**	**(137)**	**(137)**	**(411)**

12. Cost Assumptions

- It is assumed that there is no limit to the usage of the video conferencing facilities and hence the RTB costs are fixed and not dependent on the usage.

13. Benefits Summary

Benefits £k	Yr 1 08/09	Yr 2 09/10	Yr 3 10/11	Yr 4 11/12	Yr 5 12/13	Total
Reduced trans-Atlantic premium economy travel (Assuming that £2,460 is the premium economy travel & lodging expense for each employee per trip) Assuming 9 person trips saved for each meeting. So for 21 meetings in a year the trips avoided will be 189 person trips	0	233	465	465	465	1628
Total	0	233	465	465	465	1628

14. NPV

The NPV for this project is **£38k** with a pay back period of 3.5 years. The TCO log is attached in Appendix C, and includes assumptions

15. Additional Impacts

The facilities may not be available for the duration of the revamping and hence may result in increased travel costs.

16. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	The technology is not accepted and that people continue to travel	Maintain enforcement of the revised travel policy and approval to travel at Band A level.	£15k	Procurement reporting
2	Creation of the new facilities in Reservoir	Engage with facilities project to ensure that all	£15k	Project plan

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
	Woods may not be complete when the building starts to be populated	efforts are working towards desired state and no costs are stranded		
3	The costs associated with the aesthetics of the rooms may be more than expected.	The facilities have been consulted for an approximation on the costs for altering the aesthetics of the rooms	£30k (£10k / site)	National Grid Project Manager
4	Non-availability of key resources (National Grid and selected vendor) may delay the project, impacting the project timescales	Project Manager is aware of the scope and activities. This will help in identifying the resources with right skills well in advance.	£20k	National Grid Project Manager
5	The design activities may have to be re-looked to accommodate any new executive requirements thereby increasing the costs of the projects and resulting in delay to the project	The likelihood of this happening is low, however the design will be discussed and agreed before implementation	£20k	National Grid Project Manager

Appendices

A. Resources

Stage 1:

Role	IS FTE	LoB FTE	Contractor	Systems Integrator	ODC	Other
Project Managers	1					
Facilities manager	1					
C&W Project Manager						1
C&W Technician						2
Testers						

Stage 2:

External Resource Engagement:

- C&W will be engaged via legacy contract and the standard process of raising a Purchase Order
- The vendor will be engaged through the standard process of raising a Purchase Order

Stage 3:

Name	Role	FTE	Start	End	Availability*
Howard Parker	PM	0.23	Mar 09	Sept 09	Confirmed

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B. Financial Impact – breakdown

The Total Project costs shown in the table below

Project Costs £k	Yr 1 08/09	Yr 2 09/10	Yr 3 10/11	Yr 4 11/12	Yr 5 12/13	Total
Requirements & Design - OPEX						
Requirements & Design - CAPEX						
Requirements & Design – risk margin						
R&D SUBTOTAL						
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS		36				36
Internal resource – business		0				0
External resource		26				26
Hardware		718				718
First Year RTB (for 6 months)		68				68
Other (Furniture and room upgrades)		174				174
Risk Margin		102				102
D&I SUBTOTAL		**1,124**				**1,124**
TOTAL PROJECT COSTS		**1,124**				**1,124**
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

C. TCO log

Date Last updated: 18th Feb 09 — Year # in financial year: 2008-2009

TOTAL COST LOG FOR IS INVESTMENTS

Enter system name: Executive Video Conference Board Rooms

Enter Scheme No: (e.g. ISREVxxxx or ISCAPxxxx)

LIFECYCLE COST SUMMARY

	Previous Cumulative £'000s	Year 0 £'000s	Year 1 £'000s	Year 2 £'000s	Year 3 £'000s	Year 4 £'000s	Year 5 £'000s	Year 6 £'000s	Total £'000s	
Current Annual Support Costs		-	-	-	-	-	-	-	-	+
Previous Investments									-	+
This investment OPEX		-	-	-	-	-	-		-	
This investment CAPEX		-	1,124	-	-	-	-		1,124	
This Investment TOTAL		-	1,124	-	-	-	-		1,124	+
Future Investments			-	-	-	-	-	-	-	+
TOTAL COST		-	-	1,124	-	-	-	-	-	1,124 =

INCREMENTAL SUPPORT COST OF THIS INVESTMENT

Net Incremental Support Costs	-	-	137	137	137	137	-	549

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TCO- Video
Conference Ver 1.0.x

Executive Video Conferencing Board Room Ver 1.0

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Case 10-E-0050
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CAPEX IS Investment Proposal – Summary
Networking Minor Works for National Grid UK and US
IS-CTO, Shared, Project Number- ISCAP2230

A project sanction paper by Nigel Walker for Chris Murphy – September 08

Description

This investment proposal seeks sanction to provide fund for Networking Minor Works at National Grid US & UK locations. This fund will be used for rapid replacement of failed / EoL (End of Life) components and the maintenance of the spares holdings. These activities will be grouped under five categories based on geographies viz., UK activities, Upstate New York activities, Downstate New York activities, New England activities and Central Services

APPENDIX 11.D. projects the funds allocation for all the individual activities. The fund will be used to cover the financial year ending March 31st 2009.

Category: Policy driven

Risk score: 34

Primary Driver: Risk Mitigation associated with aged network infrastructure

Project Classification: Medium **Region: UK & US**

Finance

Sanction Cost: **£731k** (inclusive of **£122k** (20%) risk margin)

Project included in approved Business Plan? **INVP1404 (Voice Assets) & INVP1401 (Data Assets)**

Project cost relative to approved Business Plan

The costs are apportioned to different lines of business:

57% - GAS, 8% - GTO, 2% - GSO, 31% - ETO 2% - ESO

Resources

Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	Green

Key issues

- Increased Operational and associated business risk due to reduction of SLA's or non-availability of support for critical infrastructure due to EoL assets. This may render the business applications inaccessible potentially leading to non-compliance with regulatory requirements and increased costs and business process failure.

Key milestones

- PRM Approval – ***3rd September 2008***
- Paper signed by the project sponsor – ***8th September 2008***
- Start of the delivery phase – ***1st November 2008***
- End of the delivery phase – ***31st March 2009***

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Climate change	
Contribution to National Grid's 2050 60% emissions reduction target:	Positive (resulting from reduction of server footprints)
Impact on adaptability of network for future climate change:	Not Applicable
Are financial incentives (e.g. carbon credits) available?	No

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of **£731k** (inclusive of **£122k** risk margin)

(b) NOTE that is the Project Sponsor Chris Murphy

(c) NOTE that below mentioned Technical Project Managers will manage the sanctioned amount and has the approved financial delegation to deliver Networking Minor Works for National Grid UK and US.

N Jamieson - (UK Activities)

E Dombkowski - (Downstate NY Activities)

M Bromfield - (New England Activities)

D Newton - (Upstate NY Activities)

J DiBello - (Central Services)

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Kelvin Beechey, Enterprise Planning and Development Manager, Global IS

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

Brian Kelly, Department Head, Global IS Services and Operations

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CAPEX IS Investment Proposal – Summary
Networking Minor Works for National Grid UK and US
IS-CTO, Shared, Project No. ISCAP2230

A project sanction paper by Nigel Walker for Chris Murphy – September 08

1. Background

National Grid has a large network infrastructure comprising of various components. Each of these components has a definite service life and to ensure service reliability and support it is necessary to replace these components as they reach end of life. This paper is seeking funding to purchase and install replacements of those components which are reaching end of life in this financial year.

Presently the network infrastructure at National Grid has been geographically distributed spanning across US and UK locations, providing both voice and data services to the business. The dependencies on these services have become critical for the business operations. Some of the components supporting data and voice services have reached or nearing their End of Life (EoL) increasing the operational and business risk.

To mitigate this operational and business risk there is a need to refresh the EoL devices. Timely refresh of the EoL devices will avoid risk of running the critical business applications on unsupported infrastructure (refresh includes components supporting CNI systems such as IGMS, DNCS etc.). Also during the normal lifecycle of the products there are possibilities, that the components supporting the product may develop fault, needing immediate replacement. Hence it is recommended that the budget is approved covering rapid replacement of failed components and the maintenance of spares holdings.

This asset refresh activity is grouped under five categories based on geographies viz., UK activities, Upstate New York activities, Downstate New York activities, New England activities and Central Services

This investment proposal seeks funding of **£731k** (inclusive of **£122k** risk margin) to refresh network devices/equipments nearing EoL status at the identified locations. The risk margin allocated for the project covers the funding of break fix of the components that goes faulty. The scope of this refresh activity includes:

- Identify EoL network assets
- Development of PID detailing delivery methodology
- Refresh of the identified aged network assets

This project is expected to refresh the aged network assets by the end of this financial year.

2. Business Issues and Investment drivers

The drivers for this scheme can be summarised as follows

- To mitigate the risk of continuing on unsupported infrastructure, on failure may potentially leave critical applications inaccessible leading to significant loss or regulatory implications ***(refresh includes components supporting CNI systems such as IGMS, DNCS etc.)***
- Extended support due to the refresh of EoL devices
- Deliver the benefits of National Grid's infrastructure refresh policies and also align with the National Grid's Network strategy.

3. Assumptions

- Timely availability of the list of assets that need to be refreshed
- Timely availability and engagement of the resources from National Grid and vendor/s before the start of the project

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- There will be no changes to the network architecture as a result of the refresh/upgrade.

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4. Project Description

This is an aged asset refresh project and will aim to refresh the identified aged network assets in the US and UK regions.

The primary activities during the course of the engagement would include

- Vendor engagement and management
- Identification of aged assets and development of a roadmap for refresh of the aged assets
- Developing a technical approach for refresh, considering any potential consolidation opportunities
- Stakeholder communication and engagement
- Coordination with third parties and IS teams
- Monitoring and reporting the progress to the sponsors.

The architects required for drawn from National Grid and 3rd parties from UK & US and the implementations will be carried out by the vendors under the co-ordination of technical project manager. The vendor effort cost is jointly projected with the hardware cost.

5. Options Analysis

The following two options have been considered.

Option	Recommendation	Rationale
Deliver asset refresh	Recommended	Mitigation of the risk with continued vendor support and also avoiding significant loss or regulatory implications due to inaccessibility of critical applications resulting from hardware failure.
Do nothing	Not recommended	Will result in failure to mitigate the risk with continuing on unsupported infrastructure also the failure of hardware may potentially leave critical applications inaccessible leading to significant loss or regulatory implications.

6. Milestones

Sl. No	Milestone	Date
1	PRM submission	**24th August 2008**
2	PRM approval	**3rd September 2008**
3	Paper signed by the project sponsor	**8th September 2008**
4	Start of Project	**1st November 2008**
5	End of the Project	**31st March 2009**

7. Safety, Environmental and Planning Issues

There are no issues identified

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8. Investment Recovery

8.1 Investment Classification

This investment proposal is policy driven, which intends to mitigate the operational and business risk associated with the aged assets supporting voice and data services at National Grid UK and US.

8.2 Regulatory Implications

The solution does not directly address regulatory obligations; however has a major impact to the availability of the systems which may have requirements for regulatory compliance.

8.3 Customer Impact

The proposed solution will address the immediate operational issues and shall reduce the downtimes caused due to unexpected faults in the supporting components.

8.4 Cost Summary

The below table provides the cost summary and allocation in the IS investment plan.

£k		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total	Lower Range P20	Upper Range P80
Project Cost	OPEX								
	CAPEX	731					731		
IS Investment Plan	OPEX								
	CAPEX								
Variance to plan	OPEX								
	CAPEX								

Note: The costs are apportioned to different lines of business:
57% - GAS, 8% - GTO, 2% - GSO, 31% - ETO 2% - ESO

There will be no changes to the operating costs as this is an asset refresh project

Support (RTB) costs £k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing Support Costs	0	0	0	0	0	0
New Support Cost	0	0	0	0	0	0
Impact on RTB costs (new minus existing)	**0**	**0**	**0**	**0**	**0**	**0**
Variance to Plan						

8.5 Cost Assumptions

- The project management cost is not included in the scheme cost as it is charged under the department cost (opex funds)
- Individual investments will be aligned with the network strategy
- There will be no increase in the RTB cost once refresh is performed.

8.6 Benefits Summary

Benefits (£k)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Existing RTB	0	0	0	0	0	**0**
New RTB	0	0	0	0	0	**0**
Reduced support costs	0	0	0	0	0	**0**
Cost Savings	0	0	0	0	0	**0**

8.7 NPV

This is an NPC project addressing refresh of aged assets and break fix of components. This is a policy driven project.

8.8 Additional Impacts

None

9. Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Components developing faults(break fix of the components in the normal product life cycle)	Additional cost has been included in the risk margin to mitigate this risk.	£100k	National Grid Technical Project Manager
2	Delay in procurement of hardware may impact the project schedules and costs	The vendors appraised of the requirements and negotiations will happen if necessary for timely delivery of the hardware	£12k	National Grid Technical Project Manager
4	Non-availability of key resources (National Grid and vendor) may delay the project, impacting the project timescales	Project Manager is aware of the scope and activities. This will help in identifying the resources with right skills well in advance.	£5k	National Grid Technical Project Manager
5	Delay in getting approvals for the downtimes for replacement of the hardware may lead to slippage in the project	National Grid Project manger will engage the respective lines of business well in advance and will ensure timely communication for any	£5k	National Grid Technical Project Manager

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No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
	timescales and result in increased project costs.	approvals		

10. Recommendation

The Sanctioning Authority is invited to:

(i) Approve financial sanction of **£731k** (including a maximum risk range of **£122k**) towards the delivery phase of the refresh activity.

(ii) Note the appointment of Chris Murphy, Vice President, Global IS Enterprise Operations as Project Sponsor and Regional Technical leads as Project Manager for the project deliverables.

Signature..... Date.....

Brian Kelly, Department Head, Global IS Services and Operations

11. Appendices

A. Resources

Role Description	To	Name
National Grid , Technical Project manager (UK Activities)	To provide project management support, coordination and technical documentation	Nick Jamieson
National Grid , Technical Project manager (Downstate NY Activities)	To provide project management support, coordination and technical documentation	Edward Dombkowski
National Grid , Technical Project manager (New England Activities)	To provide project management support, coordination and technical documentation	Mary Bromfield
National Grid , Technical Project manager (Upstate NY Activities)	To provide project management support, coordination and technical documentation	Doug Newton
National Grid , Technical Project manager (Central Services)	To provide project management support, coordination and technical documentation	Joseph DiBello
National Grid, Business Analyst	Prepare Investment proposal	Amit Narkar
National Grid, Stake Holder	To provide direction and responsible for the entire project	Nigel Walker
National Grid, Programme Manager	To provide programme management support	Howard Parker
National Grid, Finance	Finance review	Jane West

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B. Financial Impact – breakdown

The Total Project costs shown in the table below are indicative at this stage.

Project Costs £k	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Requirements & Design - OPEX						
Requirements & Design - CAPEX						
Requirements & Design – risk margin						
R&D SUBTOTAL						
Development & Implementation – OPEX						
Internal resource – IS						
Internal resource – business						
External resource						
Hardware						
Software						
Other						
Development & Implementation – CAPEX						
Internal resource – IS	2					2
Internal resource – business	7					7
Hardware Cost – Data (Includes Vendor efforts)	366					366
Hardware Cost – Voice (Includes Vendor efforts)	234					234
Software	0					0
Other	0					0
Risk Margin (20%)	122					122
D&I SUBTOTAL						
TOTAL PROJECT COSTS	**731**					**731**
Non-regulated project – UPLIFT						
Non-regulated project - TOTAL						

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C. TCO log

Date Last updated: 13 August 2008 — Year 0 is financial year: 2008-2009

TOTAL COST LOG FOR IS INVESTMENTS

Enter system name:

Networking Minor Works for National Grid UK and US

Enter Scheme No: ISCAP2230

LIFECYCLE COST SUMMARY

	Previous Cumulative £000s	Year 0 £000s	Year 1 £000s	Year 2 £000s	Year 3 £000s	Year 4 £000s	Year 5 £000s	Year 6 £000s	Total £000s	
Current Annual Support Costs		-	-	-	-	-	-	-	-	+
Previous Investments									-	+
This investment OPEX		-	-	-	-	-	-		-	
This investment CAPEX		731	-	-	-	-	-		731	
This Investment TOTAL		731	-	-	-	-	-		731	+
Future Investments			-	-	-	-	-	-	-	+
TOTAL COST	-	731	-	-	-	-	-	-	731	=

INCREMENTAL SUPPORT COST OF THIS INVESTMENT

Net Incremental Support Costs	-	-	-	-	-	-	-	-	-

Network Refresh - TCO.xls

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D. Details of the Network Minor Works Costs for the Year 2008-2009

Networking Minor Works Refresh for National Grid UK and US - Year 2008-2009			
	Data norms	Voice norms	Technical Project Manager
UK Activities			
PBX Refresh		£90,000	N Jamieson
Minor projects	£25,000		N Jamieson
WAN Bandwidth Upgrades	£10,000		N Jamieson
	£35,000	£90,000	
Total Cost for UK Activities	**£125,000**		
Downstate NY Activities			
Core Network Hardware Replacements (end of life)	£45,000		E Dombkowski
Network Hardware Upgrades (Capacity)	£7,500		E Dombkowski
UPS Battery Replacements		£12,500	E Dombkowski
Tools	£2,000		E Dombkowski
General Operational Voice Expenses		£16,000	E Dombkowski
	£54,500	£28,500	
Total Cost for Downstate NY Activities	**£83,000**		
New England Activities			
NE Ngrid Network Services	£50,000		M Bromfield
NE Ngrid Voice Services		£30,000	M Bromfield
NE Keyspan Network Services	£25,000		M Bromfield
NE Keyspan Voice Services		£20,000	M Bromfield
	£75,000	£50,000	
Total Cost for New England Activities	**£125,000**		
Upstate NY Activities			
Avaya PBX Upgrade (Call Center Increase Capacity)		£25,000	D Newton
Avaya CMS - (Combine Systems)		£10,000	D Newton
HCB Nortel PBX Upgrade (Companion Replacement)		£10,000	D Newton
Nortel PBX Upgrades (Misc)		£10,000	D Newton
Circuit Cards &Telephone Replacements(HCB)		£10,000	D Newton
WLAN growth	£7,000		D Newton
Cisco refresh and hub replacement	£40,000		D Newton
Data Centre switches	£25,000		D Newton
	£72,000	£65,000	
Total Cost for Upstate NY Activities	**£137,000**		
Central Services			
Long Island EMS	£50,000		J DiBello
EMS Routers	£80,000		J DiBello
	£130,000		
Total Cost for Central Services	**£130,000**		

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Date: 14 Oct 2009

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Investment Summary Sheet
ACIS Target Pricing Model – INVP 1482

Region:	US	**Category:**	NPV	**Legal Entity:**	EDG
Risk Score:	49	**Primary Driver:**	Reliability	**Project Classification:**	M

Project Description: (carryover from FY10)

Implement functional enhancements in the ACIS application to accommodate the "Target Pricing" initiative. Update Contractor Unit Pricing to support the ED&G related contract changes. The automated Target Pricing model will play a major role in achieving the complex goals of:

- Developing Project Target Costs (unit price based)
- Monitoring KPIs and calculating payments/accruals to determine true up of overall project costs based on overall KPI performance

The Electric Line contract with Alliance contractors has been signed 6 months later than expected with uncertainty towards handling macro units which is causing this FY10 project to carryover into FY11. The contract has a provision for the macro units approach; however, it is difficult to implement the macro units component in this fiscal year FY10 without a clear understanding of the business process. This work will be completed in next fiscal year FY11. This issue, with automated support of the macro units approach, was identified under the original plan as a business issue.

Update:

Due to a further 6 week delay with the start of the development and implementation phase (the business has requested additional time to make a decision with respect to implementing the Target Pricing model in FY11), the project cash flow with regard to Capex has been adjusted as follows:

FY10 Capex: 265k
FY11 Capex: 300k

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX						
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL						
Requirements & Design - OPEX	25					25
Requirements & Design – CAPEX						
Requirements & Design – risk margin	15					15
R&D SUBTOTAL	**45**					**45**
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People	255					255

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Software							
Hardware							
Telecommunications							
Service Contracts							
Risk Margin							
D&I SUBTOTAL		**255**					**255**
TOTAL PROJECT COSTS		**300**					**300**
Non-regulated project – UPLIFT							
Non-regulated project – TOTAL							
Investment Plan No:	Budget OPEX	45					45
INVP1482	Budget CAPEX	255					255
Impact on RTB costs		87	87	87	87	87	435
The costs of this project will be allocated 100% to US EDG.							
TOTAL BENEFITS $k		300	300	300	300	300	1,500

Key Business Benefits:
Business is moving forward with the Target Pricing Model, and requires automated support for the management of this initiative. If these changes are not automated business would have to manually support the initiative with additional resources costing at least $300k/year on a recurring basis.

Key risks:
The business user requirements might not be completed in FY'10 as anticipated if business process is not finalized.

Key Dates:

Sourcing Strategy:
[For example: This project will be resourced internally from both IS and LoB, or, This project will be resourced using ODC, Systems integrator and IS resources].

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): Y
Carryover To FY11 Plan (Y/N): Y

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ___ Reliability ☒ Score 42

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☐

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Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

- ☒ Asset Management
- ☐ Customer Information Systems
- ☐ Generation
- ☐ IS Services
- ☐ Multiple
- ☐ Outage Management
- ☐ Shared Infrastructure
- ☐ System Operations
- ☒ Work Management

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

- ☐ Cust. & Mkts.
- ☐ Customer Programme
- ☐ Generation
- ☐ Global Programme
- ☐ LIPA
- ☐ Network
- ☐ NGES (un-regulated)
- ☒ Operations
- ☐ EDO Transformation
- ☐ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Date: 14 Oct 2009

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Investment Summary Sheet
Cascade II – INVP 1484

Region:	US	Category:	NPV	Legal Entity:	EDG
Risk Score:	49	Primary Driver:	Reliability	Project Classification:	H / M / L

Project Description:

As part of EDO Transformation, the Substation O&M group would like to expand the piloted use of the Cascade application to the entire Substation, Relay & Telecomm community in NE / NY.
This project would also include integrating Long Island Substation assets into Cascade and LI adopting a Risk & Criticality Based Maintenance Philosophy.
The focus of this initiative is to enable Substation personal to report directly to the work site.
This project is dependent on obtaining sanctioning & implementing Cascade Phase I by the end of Q1FY10. It does not include outfitting crews with mobile hardware.

The project starts in FY10. The FY10 budget includes $285k (Opex) and $1,660k (Capex).

Project Costs $k	Yr 1 10/11	Yr 2 11/12	Yr 3 12/13	Yr 4 13/14	Yr 5 14/15	Total
Start-Up - OPEX						
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL						
Requirements & Design - OPEX						
Requirements & Design – CAPEX						
Requirements & Design – risk margin						
R&D SUBTOTAL						
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People	711					711
Software						
Hardware						
Telecommunications						
Service Contracts	753					753
Risk Margin	319					319
D&I SUBTOTAL	1,783					1,783
TOTAL PROJECT COSTS	1,783					1,783
Non-regulated project – UPLIFT						
Non-regulated project – TOTAL						

Investment Plan No:	Budget OPEX						
INVP1484	Budget CAPEX	1,783					1,783

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Impact on RTB costs	100	100	100	100	100	500

The costs of this project will be allocated 20% to US EDG (NE/NY) and 80% KS EDG (LI).

TOTAL BENEFITS $k	3,060	4,050	4,170			11,280

Key Business Benefits:
Increased efficiency and field productivity by reducing travel time and eliminating multiple site visits.
Increased focus on substation overall condition and follow up work orders.

Key risks:	**Key Dates**:

Sourcing Strategy:
[For example: This project will be resourced internally from both IS and LoB, or, This project will be resourced using ODC, Systems integrator and IS resources].

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): Y
Carryover To FY11 Plan (Y/N): Y (FY10 $677K Opex to FY11 Capex)

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ___ Reliability ☒ Score 46 (6/7)

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☒ Asset Management
☐ Customer Information Systems
☐ Generation
☐ IS Services
☐ Multiple
☐ Outage Management
☐ Shared Infrastructure
☐ System Operations
☐ Work Management

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Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☐ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☒ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☐ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Date: 31 Jul 2009

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Investment Summary Sheet
INVP 1485 - Computapole Upgrade

Region:	US	**Category:**	Policy	**Legal Entity:**	EDG
Risk Score:	45	**Primary Driver:**	Reliability	**Project Classification:**	H / M / L

Project Description:

Computapole upgrade.
Computapole system is used to manage inspection data gathered from field using the PDA devices and raise work identified using STORMS. This vendor product is written in Visual Foxpro which has a limited support and will not be supported at all in the near future. The Computapole application has to be converted to the supported standard technology, .NET.

The Computapole upgrade will also address the following tasks:

Feeder patrol automation.
Feeder patrols that are conducted on Worst performing feeders identified with the Feeder Hardening process use paper forms that are time consuming and inefficient, no data analysis can be done. The feeder patrols data have to be included into the Computapole application to enable efficient management and analysis of data.

Integration of the UGInspection program into Computapole
Currently Upstate NY and NE are using different software systems for the inspection of underground assets, Computapole in NY and UG Inspection in NE. Integration of the UG Inspection program into Computapole will enable consistent management and analysis of the UG inspection data.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX		10				10
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL		**10**				**10**
Requirements & Design - OPEX		149				149
Requirements & Design – CAPEX		159				159
Requirements & Design – risk margin						
R&D SUBTOTAL		**308**				**308**
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People		317				317
Software						
Hardware						
Telecommunications						
Service Contracts						

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Date: 31 Jul 2009

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Risk Margin							
D&I SUBTOTAL		**317**				**317**
TOTAL PROJECT COSTS		**635**				**635**
Non-regulated project – UPLIFT						
Non-regulated project – TOTAL						
Investment Plan No:	Budget OPEX		159				159
INVP1485	Budget CAPEX		476				476
Impact on RTB costs		0	0	0	0	0

The costs of this project will be allocated 100% to US EDG (NE/NY).

TOTAL BENEFITS $k						

Key Business Benefits:

- Compliance with the nationalgrid company standard S/W platform, eliminating dependency on Visual Foxpro that will not be supported by Microsoft in the future
- Feeder patrols data will be managed and analyzed more efficiently that will enable better planning of the feeder hardening tasks
- Integration of all the inspections for UG assets in one system, Computapole, will facilitate more efficient management of the UG assets (inspection and maintenance)
- Both the handheld device and the desktop application will be on the same software platform making it easier to maintain

Key risks:	**Key Dates**:

Sourcing Strategy:
[For example: This project will be resourced internally from both IS and LoB, or, This project will be resourced using ODC, Systems integrator and IS resources].

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): Y (FY12)
Carryover To FY11 Plan (Y/N): N

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☒ Score 45 (6/6)

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

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Date: 31 Jul 2009

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Case 10-E-0050
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Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☒ Asset Management	☐ Outage Management
☐ Customer Information Systems	☐ Shared Infrastructure
☐ Generation	☐ System Operations
☐ IS Services	☐ Work Management
☐ Multiple	

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☐ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☒ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☐ Other

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Date: 31 Jul 2009

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Case 10-E-0050
Attachment C1 to DKS-11

RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

National Grid Confidential

Date: 14 Aug 09

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Case 10-E-0050
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Investment Summary Sheet

INVP 1488B - Remote Access to Transmission Fault Recorders

Region:	US	**Category:**	Policy	**Legal Entity:**	EDG
Risk Score:	49	**Primary Driver:**	Reliability	**Project Classification:**	H

Project Description:

This initiative will improve Protection Engineering's capability to retrieve transient fault records used in the analysis of Bulk Power System and Critical Transmission disturbances. This proposal includes 55 substations in New England and Upstate New York. The improved connectivity will allow Protection Engineering to retrieve fault records more efficiently enabling a thorough analysis, meeting NERC Standard PRC -018 and NPCC A15 compliance criteria and meet the expectation of the Transmission Operating Committee to identify root causes of system mis-operations in order to improve transmission system reliability.

This project was started in FY10. The FY10 budget: $83k - Opex, $337k – Capex.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX						
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL						
Requirements & Design - OPEX						
Requirements & Design – CAPEX						
Requirements & Design – risk margin						
R&D SUBTOTAL						
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People	100					100
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin	15					15
D&I SUBTOTAL	**100**					**100**
TOTAL PROJECT COSTS	**115**					**115**
Non-regulated project – UPLIFT						
Non-regulated project – TOTAL						

Investment Plan No:							
INVP1488	Budget OPEX						
	Budget CAPEX	115					115

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Impact on RTB costs	10	10	10	10	10	50

The costs of this project will be allocated 100% to US Transmission.

TOTAL BENEFITS $k						

Key Business Benefits:

Failure to retrieve fault data in a timely manner will impede analysis of power system events and will place National Grid at risk of being in violation of the compliance requirements of NERC Standard PRC-018 and NPCC Document A15 – Disturbance Monitoring Equipment Criteria. Non-compliance with the NERC standards could result in fines of up to $1M per day per violation.

Key risks:

Key Dates:

Sourcing Strategy:
[For example: This project will be resourced internally from both IS and LoB, or, This project will be resourced using ODC, Systems integrator and IS resources].

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): Y
Carryover To FY11 Plan (Y/N): Y

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☒ Score 44 (6/5)

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☐

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☒ Asset Management
☐ Customer Information Systems
☐ Generation
☐ IS Services
☐ Multiple
☐ Outage Management
☐ Shared Infrastructure
☐ System Operations
☐ Work Management

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Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☐ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☒ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☐ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Date: 09/24/08

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Mandate Summary Sheet
Non-Interval Collection Systems Consolidation INVP 1549

Region: US	**Key Driver:** NPV	**Form of Control:** Shared

Project Description:

- Consolidate Non-Interval Collection systems within Itron Field Collection System (FCS). Currently, Upstate New York and New England non-interval meter reading is consolidated into a single collection system and a single billing system – Itron PP4 and CSS. Downstate uses separate Itron MVRS systems in Brooklyn and Long Island. These systems are at different versions. (See INVP0922). These MVRS systems each feed a separate billing system. RI Gas is also utilizing MVRS, which feeds yet another billing system.
- Extensive research and testing of FCS must be conducted first. A deployment strategy must be developed, i.e., one FCS application and one database, multiple instances of FCS and multiple databases, multiple instances of FCS and multiple databases.

Key Business Benefits:

- Cost savings will be realized by consolidation of systems.
- Will enable a single interface to Customer Service System.

Financial Summary:

COSTS ($ k out-turn)	**Year 1 2010/11**	**Year 2 2011/12**	**Year 3 2012/13**	**Year 4 2013/14**	**Year 5 2014/15**	**TOTAL**
Requirements & Design OPEX						
Requirements & Design CAPEX						
Requirements & Design risk margin						
Requirements & Design SUBTOTAL						
Development & Implementation OPEX	450	80				530
Development & Implementation CAPEX	1280					1280
Risk margin						
TOTAL SCHEME COSTS	1730	80				1810
Non-regulated scheme – UPLIFT						
Non-regulated scheme TOTAL COSTS						
Impact on RTB costs						
TOTAL BENEFITS						

Key risks:

Potential to interfere with timely meter reading which would result in potential impacts to billing.

Key Dates:

Project start year: FY11
Project end year: FY12

Investment Plan No: INVP 1549						
Budget (ISIP v9.0) OPEX						
Budget (ISIP v9.0) CAPEX						
Impact on RTB costs (ISIP v9.0)						

[enter budget statement here]

Scheme NPV:	VCR:	IRR:	Payback period:

Sourcing Strategy:

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Mandate Summary Sheet

INVP 1660 – Legacy Grid Web Self Service SW Upgrade

Region:	US	**Category:**	Policy	**Legal Entity:**	[see guidelines for list]
Risk Score:	42	**Primary Driver:**	Reliability	**Project Classification:**	H

Project Description:

Bolster the Application and Technical Infrastructure to support the Web Self Service growth. The current environment has capacity limitations which could be exceeded within the next 2 years.

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Project Costs $k		Yr 1 FY10/11	Yr 2 FY11/12	Yr 3 FY12/13	Yr 4 FY13/14	Yr 5 FY14/15	Total
Start-Up - OPEX		0.012	0.012				0.024
Start-Up – CAPEX							0.000
Start-Up – risk margin			0.000				0.000
Start-Up SUBTOTAL		0.012	0.012	0.000	0.000	0.000	0.024
Requirements & Design - OPEX		0.107	0.106				0.213
Requirements & Design – CAPEX							0.000
Requirements & Design – risk		0.021	0.022				0.043
R&D SUBTOTAL		0.128	0.128	0.000	0.000	0.000	0.256
Development & Implementation – OPEX							
People		0.300	0.300				0.600
Software							0.000
Hardware							0.000
Telecommunications							0.000
Service Contracts							0.000
Risk Margin		0.060	0.060				0.120
Development & Implementation – CAPEX							
People							0.000
Software							0.000
Hardware		0.125	0.125				0.250
Telecommunications							0.000
Service Contracts							0.000
Risk Margin		0.025	0.025				0.050
D&I SUBTOTAL		0.510	0.510	0.000	0.000	0.000	1.020
TOTAL PROJECT COSTS		0.650	0.650	0.000	0.000	0.000	1.300
Non-regulated project – UPLIFT							0.000
Non-regulated project – TOTAL							0.000
Investment Plan No:	Budget OPEX	0.500	0.500	0.000			1.000
INVP1661	Budget CAPEX	0.150	0.150	0.000			0.300
Impact on RTB costs			0.026	0.050	0.050	0.050	0.175

The costs of this project will be allocated Electric 85% Gas 15% (meter based allocation).

TOTAL BENFITS							0.000

Key Business Benefits:

Provide the appropriate infrastructure to support the growth goals for Web Self Service usage.

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Key risks: Technical decisions coming out of Global Web may eliminate the need for this initiative.	**Key Dates**:
Sourcing Strategy: This project will be resourced using ODC, Systems integrator and IS resources.	

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): No
Carryover To FY11 Plan (Y/N): No

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☒ Score 42

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☒ HIGH: ☐

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☐ Asset Management	☐ Outage Management
☒ Customer Information Systems	☐ Shared Infrastructure
☐ Generation	☐ System Operations
☐ IS Services	☐ Work Management
☐ Multiple	

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☒ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☐ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☐ Other

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Mandate Summary Sheet

INVP 1660 – Legacy Grid Web Self Service SW Upgrade

Region:	US	**Category:**	Policy	**Legal Entity:**	[see guidelines for list]
Risk Score:	42	**Primary Driver:**	Reliability	**Project Classification:**	H

Project Description:

Bolster the Application and Technical Infrastructure to support the Web Self Service growth. The current environment has capacity limitations which could be exceeded within the next 2 years.

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Project Costs $k		Yr 1 FY10/11	Yr 2 FY11/12	Yr 3 FY12/13	Yr 4 FY13/14	Yr 5 FY14/15	Total
Start-Up - OPEX		0.012	0.012				0.024
Start-Up – CAPEX							0.000
Start-Up – risk margin			0.000				0.000
Start-Up SUBTOTAL		0.012	0.012	0.000	0.000	0.000	0.024
Requirements & Design – OPEX		0.107	0.106				0.213
Requirements & Design – CAPEX							0.000
Requirements & Design – risk		0.021	0.022				0.043
R&D SUBTOTAL		0.128	0.128	0.000	0.000	0.000	0.256
Development & Implementation – OPEX							
People		0.300	0.300				0.600
Software							0.000
Hardware							0.000
Telecommunications							0.000
Service Contracts							0.000
Risk Margin		0.060	0.060				0.120
Development & Implementation – CAPEX							
People							0.000
Software							0.000
Hardware		0.125	0.125				0.250
Telecommunications							0.000
Service Contracts							0.000
Risk Margin		0.025	0.025				0.050
D&I SUBTOTAL		0.510	0.510	0.000	0.000	0.000	1.020
TOTAL PROJECT COSTS		0.650	0.650	0.000	0.000	0.000	1.300
Non-regulated project – UPLIFT							0.000
Non-regulated project – TOTAL							0.000
Investment Plan No: INVP1661	Budget OPEX	0.500	0.500	0.000			1.000
	Budget CAPEX	0.150	0.150	0.000			0.300
Impact on RTB costs			0.025	0.050	0.050	0.050	0.175

The costs of this project will be allocated Electric 85% Gas 15% (meter based allocation).

TOTAL BENFITS						0.000

Key Business Benefits:

Provide the appropriate infrastructure to support the growth goals for Web Self Service usage.

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Key risks: Technical decisions coming out of Global Web may eliminate the need for this initiative.	**Key Dates**:
Sourcing Strategy: This project will be resourced using ODC, Systems integrator and IS resources.	

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): No
Carryover To FY11 Plan (Y/N): No

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☒ Score 42

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☒ HIGH: ☐

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☐ Asset Management	☐ Outage Management
☒ Customer Information Systems	☐ Shared Infrastructure
☐ Generation	☐ System Operations
☐ IS Services	☐ Work Management
☐ Multiple	

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☒ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☐ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☐ Other

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d/b/a National Grid
Case 10-E-0050
Attachment C1 to DKS-11

CAPEX IS Investment Proposal – Summary
US Transaction Delivery Centre
Shared Services, Shared, Project No. INVP1671
(A project sanction paper by Martin McDermott and Douglas Liddle for William W. Fibkins – 9 December 2009)

Description

As part of the US Shared Services Transformation program, this proposal calls for IS' participation in the creation of the US Transaction Delivery Centre by installing desktop computers and the necessary network and IVR infrastructure for a staff of ~500. This centre will perform transaction processes for key back office processes such as Hire to Pay, Order to Cash, Procure to Pay, and Record to Report. The initial focus will be on Accounts Payable, Human Resource and Procure to Pay, related transactions. Note: This proposal excludes Customer & Markets which includes Order to Cash and Payment Processing. If it is determined they will be part of the Transaction Delivery Centre a separate paper will be submitted to cover the additional investment required.

The project has been broken down into two Phases: the first Phase covers infrastructure, licensing, vendor services and the build out of the telephony; the second Phase will be for additional enabling technologies to enhance performance and provide KPI reporting.

This investment proposal seeks sanction of funds of $ 1,582k for the Development and Implementation stages of Phase 1, bringing the total project cost to $ 1,782k including risk margin of $370k (Sanction for the Requirements and Design stage have already been granted).

Category: NPV – Strategic Initiative
Risk score: 37, Primary Driver –Reliability
Project Classification: Low Region: US

Finance

Sanction Cost Cost $1,782k including risk margin of $370k
Cost volatility: P20 cost: n/a P80 cost: n/a *For projects >£5m /$10m only*
Probability that project cost will exceed tolerance: n/a (Monte Carlo analysis) *For projects >£5m /$10m only*
Project included in approved Business Plan? INVP1671
Project cost relative to approved Business Plan 116%
If cost > approved B Plan how will this be funded? Business contribution.
Other financial issues:
None at this time.

$'000s	Current planning horizon								
	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6+	Total	Lower Range P20	Upper Range P80
Proposed Investment	1,782						1,782		

Resources

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Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	Green

Key issues

- Until systems are consolidated in the US, we're not likely to achieve the full potential for cost reductions.
- It has taken longer to scope out this effort than expected, which may cause this effort to carryover into FY10/11.
- Longer than expected lead time for scheduling vendor engagement, moving vendor engagement into critical path.

Key milestones

- Requirements & Design Completed – 31 December 2009
- Development Phase 1 Completion – 31 March 2010
- Implementation Phase 1 Completion – 15 April 2010
- Project closure Phase 1 – 30 April 2010

Climate change

Contribution to National Grid's 2050 80% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- Group Exec Approval obtained in October 2008
- 28 July – IS PRM meeting for R & D
- 12 August – Shared Services IS Sanction Meeting – R&D
- 24 November – IS Global Technology Governance Group (off cycle)
- 1 December – IS Project Review Meeting Phase 1 (off cycle)
- 9 December - Shared Services IS Sanction Meeting Phase 1

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Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of $1782k including risk margin of $370k by 9 December 2009

(b) NOTE that William W. Fibkins is the Project Sponsor

(c) NOTE that Martin McDermott is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

William W. Fibkins, Director, Performance Management

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

Duncan Brown, Head of IS Finance, Global IS

Information Services

I hereby support the recommendations made in this paper.

Signature..... Date.....

Madalyn Hanley, Head of Finance, Shared Services & Corporate

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

William F. Edwards, EVP US Shared Services

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d/b/a National Grid
Case 10-E-0050
Attachment C1 to DKS-11

CAPEX IS Investment Proposal – Summary
US Transaction Delivery Centre
Shared Services, Shared, Project No. INVP1671
(A project sanction paper by Martin McDermott and Doug Liddle for William W. Fibkins – 9 December 2009)

1. Background

During 2008, the Global Shared Services Business Process Outsourcing programme was initiated. The purpose of the programme was to consider processes that would be suitable, within the Shared Services business unit, for alternative sourcing which would enable National Grid to gain greater value for money and reduce the cost base.

The majority of these processes were within the back office space, namely Record to Report, Order to Cash, Procure to Pay and Human Resources. IS were invited to participate in the programme to ensure that the appropriate consideration could be given for the eventual solution that may be required.

The potential operating model, although this would always be subject to change based upon the solutions being proposed by potential service providers, was that the three ERP's, namely MySAP, PeopleSoft and Oracle would remain located in the their current locations and accessed by the service provider from their BPO facility.

The programme underwent a review, following the potential impact on other initiatives within the Electricity and Gas Distribution business. In addition, following the environmental impact of the financial sector across the globe, National Grid Executive took the decision to focus this initiative along geographical lines.

At the start of January, the US Shared Services Transformation program was initiated. This program took on the principals of the Global Initiative, except for the actual sourcing strategy. For a variety of reasons, keeping the actual transaction delivery function in house is more prudent at this time. Therefore, the program in the US calls for the creation of a centralized Transaction Delivery Centre, with an initial focus on Accounts Payable and Human Resource related transactions.

2. Driver

a. Operational cost savings through economies of scale and scope.
b. Improved quality of service.
c. Accelerated ongoing continuous improvement.
d. Improved performance management and measurement of services.
e. Increased process and cost structure adaptability to changing business conditions.

3. Project Description

Participate in the creation of a centralized Transaction Delivery Centre by installing desktops and the necessary network infrastructure for a staff of ~500, which will process AP & HR transactions in the current PeopleSoft and Oracle back office applications. We will also seek to identify and apply a reasonable set of enhancements that will render appreciable efficiencies and cost savings. This will essentially be a "lift & shift" of current transaction delivery services with minimal modifications to drive further efficiencies.

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Initial Phase
– Participate in the creation of the scope of modifications to the current business processes and applications. Those modifications should be focused on a) removing obstacles that would prevent the targeted transactions from running in a centralized transaction centre, and/or b) driving efficiencies in the centralized business processes.

– Participate in the creation of a more detailed business case by providing IS specific activities and costs.

Requirements and Design Phase

– Identify the specific detailed requirements for desktop devices, telecommunications, modifications to the existing applications and/or use of technologies such as collaboration tools, scanning, Interactive Voice Response and web based processing.

Development and Implementation Phase 1

- There will be an initial drive to "lift & shift" the targeted transaction processing from their current locations to a centralized transaction centre. The appropriate hardware will be installed / upgraded to accommodate transaction processing coming into the centre. Again, some modifications to existing applications may be required to accomplish this.
- Following that initial drive, there will likely be a few waves of activity focused on implementing modifications and/or other technologies (e.g. Sharepoint) that drive efficiency gains.

These include:

- Build out of the Syracuse Office Complex (SOC) Telephony infrastructure (Avaya Phone Switch) to support the TDC.
- Enhance the current SOC Contact Centre eQuality infrastructure and bring the TDC onto the platform.
- Take over the SOC Virtual Hold infrastructure for use by the TDC.
- Join the SOC Contact Centre in the use of a Hosted automatic eMail response, Knowledge Base, Case Management and KPI solution.
- Appropriate desktop, laptop and printers as required.
- SharePoint form and procedure repository.

Development and Implementation Phase 2

- Additional enhanced performance enabling technologies to enhance performance and provide KPI reporting.

These include:

- Self Service web Portal (the extent will depend on the US Back Office future capability).
- IVR functionality

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- Additional Screen-Pop capability to preload the proper system automatically on the reps desktop as the call comes in.
- Additional KPI and performance reporting.

4. IS / Business Issues

a. Keeping alignment with the overall IS ERP strategy while achieving the expected and committed business savings for the Transaction Delivery Centre implementation.
b. Timing for the release of the IS Systems Strategy is directly tied to maximizing the possible business process improvements.
c. Ensuring adequate and knowledgeable IS resources are available to address any system changes required to support identified business process improvements that are brought forward from each business process review.
d. Ensuring adequate and knowledgeable Business resources are available to support the required business activities throughout the project phases.

5. Options Analysis

Option	Recommendation	Rationale
Do Nothing:	Rejected	Will not deliver the targeted savings. Without delivering the solution the Business would not gain the required efficiencies nor have the required features in place to run the operation.
Defer project:	Rejected	Will not deliver the targeted savings within the desired timeframe. This strategic initiative needs to be delivered in advance of the US Back Office to deliver the targeted savings.
Outsource Transaction Processing to a third party vendor	Rejected	Would have a negative impact on other Electricity and Gas Distribution initiatives.
Establish a Transaction Delivery Centre in Syracuse, NY	Recommended	Will tap a more moderately priced labor market and provide labor efficiencies by co-locating staff performing similar duties and simplifying business processes where possible.

6. Milestones

Key Milestones	Date	Responsible person...
Initial Phase		

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Key Milestones	Date	Responsible person...
Initial Kick Off	23/Jan/09	D. Liddle
Data Gathering	02/Feb/09 to 13/Feb/09	D. Liddle, A. Rosenkrantz
Data Validation	19/Jan/09 to 6/Feb/09	J S Johal, Martin Evans, Ed Page, Din Bhalla, Cindy Peluso
Supplier Briefings	28/Jan/09 to 30/Jan/09	J S Johal, Martin Evans
Issue of RFP	09/02/09	J S Johal
Evaluation Phase		
Preparation for Joint Development Sessions	02/02/09	Brian Parker
Participation in Joint Development Sessions	16/02/09	Brian Parker, Martin Evans, Din Bhalla, Cindy Peluso,
Evaluation of Responses and Down select	16/Mar/09 to 06/Apr/09	Brian Parker, Martin Evans, Din Bhalla, Cindy Peluso, EA
BAFO including Site Customer visits	06/Apr/09 to 24/Apr/09	Brian Parker, Martin Evans, Din Bhalla, Cindy Peluso
Requirements and Design Phase 1		
Paper to ISLT for Requirements and Design Phase	28/July/09	Steve Pitts
Requirements and Design Phase	15/Aug/09 to 15/Dec/09	Steve Pitts, PM-Martin McDermott
Development and Implementation Phase 1		
Paper to ISLT for Development & implementation Phase	09/Dec/09	PM-Martin McDermott
Development and Implementation phase	16/Dec/09 to 31/Mar/10	PM-Martin McDermott & Team
Go-Live and Post Implementation Support	31/Mar/10 to 30/Apr/10	PM-Martin McDermott & Team
Project Closure	30/Apr/10	PM-Martin McDermott

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7. Safety, Environmental and Planning Issues

No Safety or Environmental issues anticipated. A decision on the US Systems Consolidation strategy may call for a review of the outstanding work on this initiative to ensure we minimize any regret costs.

Investment Recovery

8. Investment Classification

NPV

9. Regulatory Implications

This project will help National Grid achieve the savings that were projected following the merge with KeySpan and factored in to the rates negotiated with the PUC in NY.

10. Customer Impact

This project will facilitate Shared Services in reducing the cost of their services to the various LOB's and improve the overall quality of the work performed within Shared Services.

Financial Impact

11. Cost Summary

The following table show the full costs for the project for Phase 1. This investment proposal seeks sanction of funds for the Phase 1 Development and Implementation stages of the project. These amount to $1,782k including $370k Risk (this also includes the $200k approved for R&D) – a detailed breakdown is provided in Appendix B.

$'000s		Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6 +	Total	Lower Range P20	Upper Range P20
Project Cost [1]	Opex	595						595		
	Capex	1,187	500		180			1,867		
IS Investment Plan [2]	Opex									
	Capex	1,580			180			1,760		
Variance to plan [3]	Opex	(595)						(595)		
	Capex	394	(500)					(107)		

Note 1: Project costs are only reflective of Phase 1 project costs, Phase 2 costs $500k in year 2 and $180k in year 4 appear only as indicative on the chart.

Note 2: Refer to Section 12 Cost Assumption 2 ($1,580k Capex reduced to $1,530k due to substitution in Year 1).

Note 3: Refer to Section 12 Cost Assumption 1 (Referencing the Business picking up the Cost of Licenses and RTB for the RightNow hosted solution putting us overall under budget, and decreasing the Opex

overspend). $500k in Year 2 (fiscal year 10/11) is in the draft version of the investment plan which will be used to cover Phase 2.

The costs for this project will be allocated 50% to legacy KSE companies and 50% to legacy NGUS companies.

This project will have an impact on IS ongoing support costs, although fewer business people will be carrying out the same workload. Additional licenses for various tools/technologies for the US TDC will primarily drive the increase.

12. Cost Assumptions

The Business will pick up the License costs for the RightNow Hosted solution ($442k Opex project cost which covers two years use, $221k RTB) the remaining costs ($1,340k) reflect the funds provisioned in the IS Investment Plan for establishing the US Transaction Delivery Centre.

$50k of the original provisioned funds has been earmarked for substitution to cover an expected CAPEX overrun on INVP 1667 (Sales & Use Tax Automation) leaving $1530k for US Transaction Delivery Project.

The bulk of the funding will be spent on Infrastructure (e.g. new desktop computers, additional network servers/bandwidth, additional/upgraded equipment, etc.). A portion of the funds will be used for minor application modifications and/or use of other technologies (e.g. Sharepoint, Screen Pop, etc.) that will drive efficiency gains.

13. Benefits Summary

Benefits - $'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Total
Cost Savings –see below						

The cost savings reflect the businesses projected savings associated with the establishment of the US Transaction Delivery Centre. This project is essentially an enabler to the business achieving those savings. It's difficult to isolate the savings that would be directly related to the IS specific effort.

Those savings will be achieved via economies of scale gained by centralizing all transaction processing for Shared Services and process efficiency gains leading to FTE reductions and to a smaller extent thru a more moderately priced labor market. Those total savings were forecasted / verified by Evelyn Kaye and William Fibkins.

14. NPV

Total projected savings from establishing the US Transaction Delivery Centre is forecasted in the $4.2m to $16m per year. This project is an enabler to achieving those savings.

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15. Additional Impacts

Not applicable.

16. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1	Total requirements exceed allocated funding.	Monthly review of project financials.	$0K	Program & Project Managers
2	We exceed the time planned for Req & Design stage	Weekly Project Review	$20k	Program & Project Managers
3	Additional Required infrastructure or application components are uncovered (Desktops/Printers/etc)	Weekly Project Review	$20k	Program & Project Managers
4	True Hardware/Services costs exceed estimates, additional hardware costs uncovered on Phone switch.	Weekly Project Review	$40k	Project Manager
5	Capacity limits on the current link between the Phone Switch (Avaya) and windows Transaction Server via Multi-Application Platform Definity (MapD) card requires a more expensive Application Enablement Server (AES) solution.	Purchase and install an Application Enablement Server (AES).	$190k	Project Manager & Tech Team
6	Witness/Virtual Hold costs exceed estimates for services or hardware.	Rationalize any change to original estimate.	$20k	Project Manager
7	Vendor Service contracts exceed estimates RightNow.	Rationalize any change to original estimate.	$30k	Project Manager
8	Additional minor modifications are uncovered.	Insure any additional changes fit within the scope of the project.	$50k	Project Manager

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Appendices

A. Resources

Step 1:

Role	National Grid Resources (FTEs)		External Resources (FTEs)			
	IS	Business	Contractor	Systems Integrator	ODC	Other
Program Managers (PgM)	.1	.1				
Project Managers (PM)	1	1				
Business Analysts (BA)						2
Application Developer (AD)						4
Enterprise Architects (EA)	.2					
Database Administrator (DBA)	.1					
Data Architects (DA)	.1					
Telecom Analysts	.5					
IVR Analysts	.25					

The following resources are NOT included in the project costs:
The Business Program Managers, the Business Project Manager and the Business Analysts.

Step 2:

External Resource Engagement:
IS PM & BA Contractor – contract with PrO Unlimited for the services of TBD to end Mar 2010.
Application Developer – following R&D stage, contract with PrO Unlimited for the services of TBD for the period required to carryout application modifications.

Step 3:

Name	Role*	Source**	FTE	Start	End	Availability***
Martin McDermott	PM	IS	1	Oct 09	April 10	Confirmed
RightNow (Professional Services)	BA	Ext	4	Dec 09	Mar 10	TBC
TriNet (Professional Services)	AD	Ext	.75	Dec 09	Mar 10	TBC
Verint -Witness (Professional Services)	AD	Ext	.25	Jan 09	Mar 10	TBC
Stephen Gates	EA	IS	.1	Aug 09	Dec 09	Confirmed
Mahantesh Vantmuri	EA	IS	.1	Nov 09	Mar 10	Confirmed
Depends on Apps to be modified	DBA	IS	.1	TBD	TBD	TBC
Pro Unlimited	AD	Ext	1	Dec 09	Mar 10	TBC
Jon Geggatt	DA	IS	.1	Aug 09	Mar 10	TBC
Jim Novak	TA	IS	.1	Aug 09	Mar 10	TBC
Mary Bromfield	IVR	IS	.2	Aug 09	Mar 10	TBC
Jan Costello	PBX	IS	.5	Dec 09	Mar 10	TBC
Suresh Pellakur	TA	IS	.2	Dec 09	Mar 10	TBC
Ed Bynoe	TA	IS	.05	Jan 09	Jan 09	TBC
Evelyn Kaye	PgM	Bus	.1	Aug 09	Mar 10	Confirmed
Steven Pitts	PgM	IS	.1	Aug 09	Mar 10	Confirmed
Doug Liddle	PM	Bus	1	Aug 09	Mar 10	Confirmed

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** Role: Use role abbreviations identified within Stage 1.*
*** Source: IS=National Grid IS FTE; Bus=National Grid Business FTE; Ext=External FTE*
**** Only enter Confirmed if approved by the relevant Portfolio Lead, otherwise enter TBC (to be confirmed)*

Step 4:

Resource Phasing related comments:

The majority of Phase 1 is resourced using Vendor Service Contracts with the vendors which currently support the products the Syracuse Customer Contact Centre uses. Several minor changes will be required to existing applications systems including: Requisition routing, Payroll Check Printing, etc.

B. TCO Log

The Total Project cost for Phase 1 is shown in the table below:

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TOTAL COST LOG OF IS INVESTMENT - FINANCIAL SUMMARY

Investment Name:	US Transaction Delivery Centre - Phase 1
Project Name:	US Transaction Delivery Centre INVP1671
Investment Plan No: ıent Plan No:	INVP1671
Investment Start (Financial Year):	09/10
Currency used:	US $

	09/10 $'000s	10/11 $'000s	11/12 $'000s	12/13 $'000s	13/14 $'000s	14/15 $'000s	15/16 $'000s	Total $'000s
INVESTMENT PLAN DETAILS:								
OPEX								
CAPEX	1,580			180				1,760
Net RTB Impact								
INVESTMENT COST SUMMARY								
Start-Up - Opex	20							20
Start-Up - Capex								
Start-Up - Risk Margin								
Start-Up - Subtotal	20							20
Requirements and Design - Opex	50							50
Requirements and Design - Capex	110							110
Requirements and Design - Risk Margin	20							20
Requirements and Design - Subtotal	180							180
Development and Implementation - Opex								
People	24							24
Software	495							495
Hardware								
Telecommunications								
Service Contracts	6							6
Other								
Risk Margin								
Development and Implementation - Capex								
People	161							161
Software	210							210
Hardware	140							140
Telecommunications								
Service Contracts	196							196
Other		500		180				680
Risk Margin	350							350
Development and Implementation - Subtotal	1,582	500		180				2,262
Total Investment Costs - Opex	595							595
Total Investment Costs - Capex	1,187	500		180				1,867
Total Investment Costs	1,782	500		180				2,462
Non-Regulated Project - Uplift								
Non-Regulated Project - Total	1,782	500		180				2,462
Future Investments								
VARIANCES TO INVESTMENT PLAN:								
OPEX	(595)							(595)
CAPEX	394	(500)						(107)
RTB								
Current Annual RTB Expenditure								
New Annual RTB Expenditure		84	304	304	304			996
Net RTB Impact		84	304	304	304			996
Variance to Investment Plan		84	304	304	304			996
BENEFITS ANALYSIS:								
Investment Benefits								

NPV/NPC SUMMARY INFORMATION				
Discount Rate:	NPV:		VCR:	0.13
Payback Period:	5 Years	Months		

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C:\Transaction
Delivery Centre\TDC

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Investment Summary Sheet
INVP 2162 - Primavera PM Extensions

Region:	US	**Category:**	NPV	**Legal Entity:**	EDG
Risk Score:	42	**Primary Driver:**	Reliability	**Project Classification:**	M

Project Description:

Primavera 6 Project Management System is being implemented by National Grid for the short cycle project planning (up to 18 months). This initiative will be finished in FY10.

The purpose of the initiative proposed in this paper is to improve the efficiency of the project management process by:

- implementing an additional Primavera module (Contractor Manager),
- developing robust adhoc reporting (with Business Objects), and
- integrating Primavera with the National Grid US work management and asset maintenance systems - STORMS, Maximo and Cascade.

Please note that this project does not duplicate EDOT project DTWNEW05; however it should be noted that included in DTWNEW05 is a task to provide contractors with read only access to Primavera for work planning purposes and to configure automatic notifications to contractors about projects/activities assigned to them. Since the described task is within the scope of the Primavera Project Mgmt Extensions project (INVP 2162), it is recommended to provide that functionality as a part of this project since it would be more efficient to do so.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX	10					10
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL	**10**					**10**
Requirements & Design - OPEX	100					100
Requirements & Design – CAPEX	100					100
Requirements & Design – risk margin						
R&D SUBTOTAL	**200**					**200**
Development & Implementation – OPEX						
People	30					30
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People	326					326
Software	30					30
Hardware						
Telecommunications						
Service Contracts						
Risk Margin	60					60

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D&I SUBTOTAL		446					446
TOTAL PROJECT COSTS		656					656
Non-regulated project – UPLIFT							
Non-regulated project – TOTAL							
Investment Plan No:	Budget OPEX	140					140
INVP2162	Budget CAPEX	516					516
Impact on RTB costs							
The costs of this project will be allocated 100% to US ED&G.							
TOTAL BENEFITS $k			750	750	750	750	3,000

More efficient project management will result in at least $750k of annual benefits.
Electric Distribution will spend over $527M for FY2010 of which $52M is allocated on external contractors. EDO Transformation has identified business efficiencies to be gained by expanding the use of Primavera P6 for project management including status progress and the prompt identification of issues/change orders. ERP System interfaces are required components to achieving these efficiencies. These efficiencies and benefits are additional to those delivered by the SHORT04 project.

Key risks:	**Key Dates**:

Sourcing Strategy:
This project will be resourced internally from both IS and LoB

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): N
Carryover To FY11 Plan (Y/N): N

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☒ Score 42 (5/7)

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☒ Asset Management
☐ Customer Information Systems
☐ Generation
☐ Outage Management
☐ Shared Infrastructure
☐ System Operations

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☐ IS Services	☒ Work Management
☐ Multiple	

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☐ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☒ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☐ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Date: 28 Jul 2009

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Investment Summary Sheet
INVP 2165 - SEAL Upgrade

Region:	US	**Category:**	Policy	**Legal Entity:**	EDG
Risk Score:	46	**Primary Driver:**	Reliability	**Project Classification:**	M

Project Description:

The Storm Emergency Assignment List (SEAL) application is being used to manage employees' assignments to the storm emergency restoration work. It also tracks relevant employees training and previous job experience. The application has a direct impact on reliability, safety, and our ability to respond to a system wide emergency efficiently and effectively.

The application is developed with an outdated technology, ASP (Active Server Pages), which limits our ability to efficiently and productively manage a large scale restoration event.

It is important to ensure reliable support of this critical application. Presently we experience systematic issues rendering the application unavailable for updates and queries. At a system level we are not able to efficiently supply reports detailing storm emergency assignments along with alternate assignments and skill sets possessed by individual employees. The process to update training records within the present system is also laborious and must be done at the employee level. We hope to enable development of new functionality to meet business needs related to efficient management of the storm restoration resources, tracking of storm/emergency assignments and training attendance. To accomplish these tasks we need to upgrade the application to a modern technology, ASP.NET.

It is also important to note that the Work Continuation Module is a "clone" of the SEAL application. Thus this project will ensure that the Work Continuation Module resides on the platform that can be supported and allows enhancements.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX	10					10
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL	**10**					**10**
Requirements & Design - OPEX	25					25
Requirements & Design – CAPEX	25					25
Requirements & Design – risk margin						
R&D SUBTOTAL	**50**					**50**
Development & Implementation – OPEX						
People	15					15
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People	180					180
Software						
Hardware	5					5

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Telecommunications							
Service Contracts							
Risk Margin							
D&I SUBTOTAL		**200**					**200**
TOTAL PROJECT COSTS		**260**					**260**
Non-regulated project – UPLIFT							
Non-regulated project – TOTAL							
Investment Plan No:	Budget OPEX	50					50
INVP2165	Budget CAPEX	210					210

Impact on RTB costs
The costs of this project will be allocated 100% to US EDG (NE/NY).

TOTAL BENEFITS $k						

Key Business Benefits:
Upgrade of Storm Emergency Assignment List (SEAL) database will ensure that we efficiently and effectively manage our employees storm/emergency assignments, provide for an increased level of emergency/storm readiness and also manage specific employee assignments during Work Continuation events. This will limit our exposure to regulatory fines that result in millions of dollars and also enable us as an organization to maintain and improve upon our present customer satisfaction ratings. Penalties in R.I. can approach $1M, penalties in MA can approach $2.5M based on our performance.

Key risks:	**Key Dates**:

Sourcing Strategy:
This project will be resourced internally from both IS and LoB

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): **N**
Carryover To FY11 Plan (Y/N): **N**

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☒ Score ___ Environmental ☐ Score ____ Reliability ☒ Score 42 (5/7)

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

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Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☐ Asset Management	☐ Outage Management
☐ Customer Information Systems	☐ Shared Infrastructure
☐ Generation	☐ System Operations
☐ IS Services	☒ Work Management
☒ Multiple	

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☐ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☒ Operations
☐ Global Programme	☐ EDO Transformation
☐ LIPA	☒ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Investment Summary Sheet

INVP 2171 - Exchange of Notice - Joint Pole - Double Pole

Region:	US	**Category:**	Mandatory	**Legal Entity:**	EDG
Risk Score:	49	**Primary Driver:**	Reliability/Environmental	**Project Classification:**	H / M / L

Project Description:

The project is being driven by:

1. a legal settlement with Verizon
2. NY PSC proceeding to evaluate a Standardized Facility and Equipment Transfer (SAFE-T) program.

1. A legal statement with Verizon is expected to be signed by the end of July 2009. The following is stated in the agreement:

Verizon and National Grid shall jointly and cooperatively pursue and implement JPP process enhancements, including use of a common web-based database. Implementation of the JPP process enhancements and database shall take place, unless otherwise mutually agreed, on or before December 31, 2010. Verizon and National Grid agree that the JPP process enhancements contained in the Settlement Agreement shall modify certain terms and conditions relating to JPP approval and invoicing which are contained in the Joint Pole Agreement.

2. National Grid has to respond to the NY PSC proceeding, CASE 08-M-0593, to evaluate a Standardized Facility and Equipment Transfer (SAFE-T) program. The program is intended to enhance the coordination, communication, monitoring and notification relating to facility transfers between utility poles owned by electric and telephone companies. In the interest of public safety and to lower costs, the Commission seeks to establish better coordination efforts between utilities transferring facilities and equipment to new poles and to speed the removal of old poles.

A process is in place in NE using InQuest.

The project scope includes:

- Extension of the current NE "Double Pole" process to NY with the same vendor, inQuest.
- Establishing a similar process for the JPP/EON coordination
- An interface with STORMS (NE and Upstate NY work management system).

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX	10					10
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL	**10**					**10**
Requirements & Design - OPEX	50					50
Requirements & Design – CAPEX	50					50
Requirements & Design – risk margin						
R&D SUBTOTAL	**100**					**100**
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						

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Development & Implementation – CAPEX							
People		340					340
Software		70					70
Hardware		15					15
Telecommunications							
Service Contracts		50					50
Risk Margin							
D&I SUBTOTAL		**475**					**475**
TOTAL PROJECT COSTS		**585**					**585**
Non-regulated project – UPLIFT							
Non-regulated project – TOTAL							
Investment Plan No:	Budget OPEX	60					60
INVP2171	Budget CAPEX	525					525
Impact on RTB costs			130	120	110	110	470

The costs of this project will be allocated 100% to US EDG (NE/NY).

TOTAL BENEFITS $k						

Key Business Benefits:

Key risks:	**Key Dates**:

Sourcing Strategy:
[For example: This project will be resourced internally from both IS and LoB, or, This project will be resourced using ODC, Systems integrator and IS resources].

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): N
Carryover To FY11 Plan (Y/N): N

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☒ Score ____ Reliability ☒ Score 49 (7/7)

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Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

- ☐ Asset Management
- ☐ Customer Information Systems
- ☐ Generation
- ☐ IS Services
- ☐ Multiple
- ☐ Outage Management
- ☐ Shared Infrastructure
- ☐ System Operations
- ☒ Work Management

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

- ☐ Cust. & Mkts.
- ☐ Customer Programme
- ☐ Generation
- ☐ Global Programme
- ☐ LIPA
- ☐ Network
- ☐ NGES (un-regulated)
- ☒ Operations
- ☐ EDO Transformation
- ☐ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Investment Summary Sheet

INVP 2172 - IDS Reliability Reporting & Analysis

Region:	US	**Category:**	Policy	**Legal Entity:**	EDG
Risk Score:	48	**Primary Driver:**	Reliability	**Project Classification:**	M

Project Description:

The Interruption and Disturbance System (IDS) application is being used for quality assurance and reporting of the electric reliability data. A significant part of this reporting is mandatory driven; it is requested by MA DPU, RI PUC and NY PSC. An electrical model is represented in IDS by an outdated tree key methodology. This approach will not be supported by the new OMS system, ABB. A new method representing the electrical model in IDS, based on the geographical approach has to be developed. This approach will ensure that IDS is functional after deployment of ABB.

There are two major tasks in this project proposal:

- Develop a geographic user interface to IDS to increase the data accuracy and data maintenance capability. This task is also necessary to ensure that the application is functional after deployment of the new OMS system, ABB. The new user interface will replace the unsustainable tree branching approach as a network model representation. This change will ensure that the IDS application is functional after deployment of ABB.
- Add Customer Outage tracking module to support estimation of CEMI and GEOCEMI parameters and customer relations management initiatives. Having customer outage details will enable tracking of customers who have experienced more that X number of outages within a specified period. It will also be possible to link repeated customer outages to particular location patterns.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX	10					10
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL	**10**					**10**
Requirements & Design - OPEX	30					30
Requirements & Design – CAPEX	30					30
Requirements & Design – risk margin						
R&D SUBTOTAL	**60**					**60**
Development & Implementation – OPEX						
People	10					10
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin						
Development & Implementation – CAPEX						
People	340					340
Software	60					60
Hardware						
Telecommunications						
Service Contracts						

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Risk Margin		30					30
D&I SUBTOTAL		**440**					**440**
TOTAL PROJECT COSTS		**510**					**510**
Non-regulated project – UPLIFT							
Non-regulated project – TOTAL							
Investment Plan No:	Budget OPEX	50					50
INVP2172	Budget CAPEX	460					460

Impact on RTB costs

The costs of this project will be allocated 100% to US EDG (NE/NY).

TOTAL BENEFITS $k						

Key Business Benefits:

Modifying IDS to remain functional with the deployment of a new OMS/DMS ensures that National Grid can maintain compliance with regulatory reporting requirements.
If IDS is rendered non-functional for reliability data capture and reporting, National Grid faces potential maximum reliability penalties (current exposure of $48M) as well as additional regulatory penalties for failure to comply with reporting requirements.

Key risks:	**Key Dates**:

Sourcing Strategy:
This project will be resourced internally from both IS and LoB

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): **N**
Carryover To FY11 Plan (Y/N): **N**

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ___ Reliability ☒ Score 48 (7/6)

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

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Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

- ☐ Asset Management
- ☐ Customer Information Systems
- ☐ Generation
- ☐ IS Services
- ☒ Multiple
- ☐ Outage Management
- ☐ Shared Infrastructure
- ☐ System Operations
- ☐ Work Management

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

- ☐ Cust. & Mkts.
- ☐ Customer Programme
- ☐ Generation
- ☐ Global Programme
- ☐ LIPA
- ☒ Network
- ☐ NGES (un-regulated)
- ☐ Operations
- ☐ EDO Transformation
- ☐ Other

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RECOMMENDATIONS *[the following sections are not required for Investment Summary or Mandate]*

The Sanctioning Authority is invited to:

a) APPROVE the investment of £/$[xx]k including risk margin of £/$[xx]k by [completion date]

b) NOTE that [xx] is the Project Sponsor

c) NOTE that [xx] is the Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

[Name and title of sponsor]

IS Finance

I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....

[Name and title]

[Line of Business] Finance *[delete if not required]*

I hereby confirm that this project [has / has not] been included in the [Line of Business] Business Plan

Signature..... Date.....

[Name and title]

Information Services *[where an IS signatory is the sanctioning authority, this is not required and can be deleted]*

I hereby support the recommendations made in this paper.

Signature..... Date.....

[Name and title]

Decision of the Sanctioning Authority

I hereby approve the recommendations made in this paper.

Signature..... Date.....

[Name and title of sanctioning authority]

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Investment Summary Sheet

INVP 2182 - EDOT Mobile Devices for Investigators (DECUS02)

Region:	US	Category:	NPV	Legal Entity:	ED&G
Risk Score:	42	Primary Driver:		Project Classification:	H / M / L

Project Description:
Purchase and implement handheld devices / tablets for field designers with mobile connectivity

[where a breakdown of costs is not available, enter total cost in "TOTAL PROJECT COSTS"]

Project Costs $k	Yr 1 10/11	Yr 2 11/12	Yr 3 12/13	Yr 4 13/14	Yr 5 14/15	Total
Start-Up – OPEX						
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL						
Requirements & Design - OPEX						
Requirements & Design – CAPEX						
Requirements & Design – risk margin						
R&D SUBTOTAL						
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin	.024					
Development & Implementation – CAPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Risk Margin	.094					
D&I SUBTOTAL						
TOTAL PROJECT COSTS	.903					
Non-regulated project – UPLIFT						
Non-regulated project – TOTAL						

Investment Plan No: INVP.....							
	Budget OPEX	.181					
	Budget CAPEX	.722					
Impact on RTB costs		.236	.236	.236	.236	.236	1.180
TOTAL BENEFITS $k		1.000	1.000	1.000	1.000	1.000	5.000

Key Business Benefits:

This initiative compliments DECUS01with the hardware and communications they needed to use GIS and WM in a mobile fashion to create simple designs from the field, capture information, etc. It will result in improved customer service and order fulfillment

Key risks:	**Key Dates**:

Sourcing Strategy:
[For example: This project will be resourced internally from both IS and LoB, or, This project will be resourced using ODC, Systems integrator and IS resources].

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): _N__
Carryover To FY11 Plan (Y/N): _N__

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☐ Score ____

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☐

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☐ Asset Management	☐ Outage Management
☐ Customer Information Systems	☐ Shared Infrastructure
☐ Generation	☐ System Operations
☐ IS Services	☒ Work Management
☒ Multiple	

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☐ Cust. & Mkts.	☐ Network
☐ Customer Programme	☐ NGES (un-regulated)
☐ Generation	☐ Operations
☐ Global Programme	☒ EDO Transformation
☐ LIPA	☐ Other

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Mandate Summary Sheet

INVP 2202 – Customer Self Service via IVR – Customer Experience

Region:	US	**Category:**	Strategy	**Legal Entity:**	[see guidelines for list]
Risk Score:	49	**Primary Driver:**	Strategy	**Project Classification:**	M

Project Description:

In an effort to provide a single US IVR presence and standard Customer Experience, the proposed projects seeks to deliver the following improvements:

- Add in house Pay by Phone application to support CSS IVR users. This will alleviate the fee paid by Customer to make a payment by phone today
- Remove Voice Recognition on the CSS IVR to increase utilization and reduce recognition errors
- Deliver insight driven interactions by logically routing callers to IVR self service options based on account status and/or prior options selected.
- Upgrade the LI (Melville Contact Center) Telephone Switch
- Utilize CTI functionality to enhance LI Customer Experience within the IVR. CIT will improve usability for Customers traversing multiple IVR applications within the LI IVR by retaining the account number. This will in turn, minimize re-entry and errors as they move from one application to another.
    - Assumes LI Switch upgrade is complete and CTI is included.

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Project Costs $k		Yr 1 FY10/11	Yr 2 FY11/12	Yr 3 FY12/13	Yr 4 FY13/14	Yr 5 FY14/15	Total
Start-Up - OPEX		0.020	0.017				0.037
Start-Up – CAPEX							0.000
Start-Up – risk margin		0.000	0.000				0.000
Start-Up SUBTOTAL		0.020	0.017	0.000	0.000	0.000	0.037
Requirements & Design - OPEX		0.040	0.084				0.124
Requirements & Design – CAPEX		0.070	0.100				0.170
Requirements & Design – risk margin		0.016	0.030				0.046
R&D SUBTOTAL		0.126	0.214	0.000	0.000	0.000	0.340
Development & Implementation – OPEX							
People		0.074	0.241				0.315
Software							0.000
Hardware							0.000
Telecommunications							0.000
Service Contracts							0.000
Risk Margin		0.010	0.043				0.053
Development & Implementation – CAPEX							
People		0.060	0.106				0.166
Software			0.100				0.100
Hardware							0.000
Telecommunications			0.400				0.400
Service Contracts		0.400	0.480				0.880
Risk Margin		0.060	0.200				0.260
D&I SUBTOTAL		0.604	1.570	0.000	0.000	0.000	2.174
TOTAL PROJECT COSTS		0.750	1.800	0.000	0.000	0.000	2.550
Investment Plan No:	Budget OPEX	0.150	0.400				0.550
INVP2202	Budget CAPEX	0.600	1.400				2.000
Impact on RTB costs			0.080	0.176	0.176	0.176	0.608

The costs of this project will be allocated 56% Electric and 44% Gas (meter based allocation - all US Grid Companies including LIPA)

TOTAL BENFITS						0.000

Key Business Benefits:

Enhanced Customer Experience

Key risks:	**Key Dates**
Sourcing Strategy: This project will be resourced internally from both IS, LoB and 3rd party vendors.	

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Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): Yes (as part of INVP0980)
Carryover To FY11 Plan (Y/N): No

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ____ Reliability ☐ Score ____ Strategic ☒ Score 49

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

- ☐ Asset Management
- ☒ Customer Information Systems
- ☐ Generation
- ☐ IS Services
- ☐ Multiple
- ☐ Outage Management
- ☐ Shared Infrastructure
- ☐ System Operations
- ☐ Work Management

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

- ☒ Cust. & Mkts.
- ☐ Customer Programme
- ☐ Generation
- ☐ Global Programme
- ☐ LIPA
- ☐ Network
- ☐ NGES (un-regulated)
- ☐ Operations
- ☐ EDO Transformation
- ☐ Other

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Mandate Summary Sheet

INVP 2203 – Customer Self Service via IVR – Operational Improvements

Region:	US	**Category:**	NPV	**Legal Entity:**	[see guidelines for list]
Risk Score:	42	**Primary Driver:**	NPV	**Project Classification:**	M

Project Description:

Our current IVR landscape is made up of 4 IVRs with significant regional variation. This project seeks to apply both industry and internal best practices to improve the adoption and utilization of the self service options available on the IVRs:

- Optimize call experience within current applications
- Align IVR menu structures across the regions to simplify navigation
- Standardize scripting and terminology across regions
- Enhance usability by refining error handling including providing "customized" *error handling* such as back-off prompts for errors and operator requests
- Deploy standardized opt out strategy across platforms
- Provide consistent and simplified authentication rules
- Develop consistent reporting flags and metrics to measure the customer experience across platforms

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Project Costs $k		Yr 1 FY10/11	Yr 2 FY11/12	Yr 3 FY12/13	Yr 4 FY13/14	Yr 5 FY14/15	Total
Start-Up - OPEX		0.010	0.010				0.020
Start-Up – CAPEX							0.000
Start-Up – risk margin		0.000	0.000				0.000
Start-Up SUBTOTAL		0.010	0.010	0.000	0.000	0.000	0.020
Requirements & Design - OPEX		0.020	0.021				0.041
Requirements & Design – CAPEX		0.050	0.075				0.125
Requirements & Design – risk margin		0.010	0.012				0.022
R&D SUBTOTAL		0.080	0.108	0.000	0.000	0.000	0.188
Development & Implementation – OPEX							
People		0.060	0.060				0.120
Software							0.000
Hardware							0.000
Telecommunications							0.000
Service Contracts							0.000
Risk Margin		0.007	0.007				0.014
Development & Implementation – CAPEX							
People		0.050	0.116				0.166
Software							0.000
Hardware							0.000
Telecommunications							0.000
Service Contracts		0.240	0.500				0.740
Risk Margin		0.053	0.100				0.153
D&I SUBTOTAL		0.410	0.783	0.000	0.000	0.000	1.193
TOTAL PROJECT COSTS		0.500	0.900	0.000	0.000	0.000	1.400
Investment Plan No:	Budget OPEX	0.100	0.100				0.200
INVPnew08	Budget CAPEX	0.400	0.800				1.200
Impact on RTB costs			0.048	0.148	0.148	0.148	0.492

The costs of this project will be allocated 56% Electric and 44% Gas (meter based allocation - all US Grid Companies including LIPA)

LABOR SAVINGS INCLUDE LOADINGS

TOTAL BENFITS		0.500	1.000	1.500	1.500	4.500

Key Business Benefits:

The proposed enhancements will increase the IVRs usability and thereby improve the Customer's Experience with this self service channel. Further, these improvements will increase the number of calls that are self served, deflecting calls to a lower cost model as compared to being handled by a live Agent.

Key risks:

[Describe any key business risks – labor negotiations, PSC approval required, etc.].

Key Dates:

Sourcing Strategy:
This project will be resourced internally from both IS, LoB and 3rd party vendors.

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Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): Yes (part of INVP0980)
Carryover To FY11 Plan (Y/N): No

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ___ Reliability ☐ Score ___ NPV ☒ Score 42

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☐

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

- ☐ Asset Management
- ☒ Customer Information Systems
- ☐ Generation
- ☐ IS Services
- ☐ Multiple
- ☐ Outage Management
- ☐ Shared Infrastructure
- ☐ System Operations
- ☐ Work Management

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

- ☒ Cust. & Mkts.
- ☐ Customer Programme
- ☐ Generation
- ☐ Global Programme
- ☐ LIPA
- ☐ Network
- ☐ NGES (un-regulated)
- ☐ Operations
- ☐ EDO Transformation
- ☐ Other

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Mandate Summary Sheet

INVP 2205 – Contact Center Business Continuity

Region:	US	**Category:**	Strategic	**Legal Entity:**	[see guidelines for list]
Risk Score:	49	**Primary Driver:**	Strategic	**Project Classification:**	M

Project Description:
Extend business continuity capabilities for the contact center to appropriate levels

Project Costs $k		Yr 1 FY10/11	Yr 2 FY11/12	Yr 3 FY12/13	Yr 4 FY13/14	Yr 5 FY14/15	Total
Start-Up - OPEX		0.010					0.010
Start-Up – CAPEX							0.000
Start-Up – risk margin		0.000					0.000
Start-Up SUBTOTAL		0.010	0.000	0.000	0.000	0.000	0.010
Requirements & Design - OPEX		0.030					0.030
Requirements & Design – CAPEX		0.050					0.050
Requirements & Design – risk margin		0.010					0.010
R&D SUBTOTAL		0.090	0.000	0.000	0.000	0.000	0.090
Development & Implementation – OPEX							
People		0.080					0.080
Software							0.000
Hardware							0.000
Telecommunications							0.000
Service Contracts		0.040					0.040
Risk Margin		0.036					0.036
Development & Implementation – CAPEX							
People		0.030					0.030
Software							0.000
Hardware							0.000
Telecommunications		0.080					0.080
Service Contracts		0.100					0.100
Risk Margin		0.034					0.034
D&I SUBTOTAL		0.400	0.000	0.000	0.000	0.000	0.400
TOTAL PROJECT COSTS		0.500	0.000	0.000	0.000	0.000	0.500
Investment Plan No:	Budget OPEX	0.200					0.200
INVPnew11	Budget CAPEX	0.300					0.300
Impact on RTB costs			0.036	0.036	0.036	0.036	0.144

The costs of this project will be allocated 56% Electric & 44% Gas (meter based allocation - All US Grid regulated companies including LIPA)

TOTAL BENFITS							0.000

Key Business Benefits:

[Describe the benefits – labor reductions, increased productivity, enhanced customer experience, etc.].

Key risks:	**Key Dates**:
Failure at contact centre would lead to degradation of Customer Experience, risk regulatory fines and potentially impact cash flow.	

Sourcing Strategy:
This project will be resourced internally from both IS, LoB and 3rd party vendor.

Carryovers:
Review, if the Investment is on the FY10 Investment Plan.

Current FY10 Investment (Y/N): No
Carryover To FY11 Plan (Y/N): No

Note Supply new Mandate Form with updated cash flow

Use the Checkboxes to indicate which Goals this Investment relates to.

Corporate Goals (Check all applicable and use Corporate Priority Scoring Categories):
Safety ☐ Score ___ Environmental ☐ Score ___ Reliability ☐ Score ___ Strategic ☒ Score 49

Relative Priority:
Please indicate the Relative Business Priority of the Investment (Check one only).
LOW: ☐ MEDIUM: ☐ HIGH: ☒

Application Function:
Please indicate which Application Function that this Investment represents (Check one only):

☐ Asset Management
☐ Customer Information Systems
☐ Generation
☐ IS Services
☒ Multiple (largely Telecommunications)
☐ Outage Management
☐ Shared Infrastructure
☐ System Operations
☐ Work Management

Line-of-Business Level-2:
Please indicate which IS Organization that this Investment falls into (Check one only):

☒ Cust. & Mkts.
☐ Customer Programme
☐ Generation
☐ Global Programme
☐ LIPA
☐ Network
☐ NGES (un-regulated)
☐ Operations
☐ EDO Transformation
☐ Other

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Date: 09/4/09

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Investment Summary – Summary Sheet
Transmission Customer System Upgrade INVP 2270

(An Investment Summary paper by Tracey Baker for Bill Malee)

Region:	US	**Category:**	Policy	**Legal Entity:**	ETO
Risk Score:		**Primary Driver:**	Reliability	**Project Classification:**	Medium

Project Description: The Transmission Commercial department uses the Transmission Customer System (TCS) to store Customer and Contract data that is relevant to regulatory and commercial reporting. This application is also used for the FERC Federal Electric Quarterly Report (EQR) filing. In order to meet the updated FERC requirements and maintain compliancy, the TCS application will need to be upgraded. The application was installed in 2002 and cannot meet the enhancements required to meet the expectations of regulatory reporting and recent audit recommendations.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX						
Start-Up – CAPEX						
Start-Up – risk margin						
Start-Up SUBTOTAL						
Requirements & Design - OPEX						
Requirements & Design – CAPEX						
Requirements & Design – risk margin						
R&D SUBTOTAL						
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Sub-Total D&I OPEX						
Risk Margin						
Development & Implementation – CAPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Sub-Total D&I CAPEX						
Risk Margin						
D&I SUBTOTAL						
TOTAL PROJECT COSTS		**350**				**$350**
Non-regulated project – UPLIFT						
Non-regulated project – TOTAL						

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Investment Plan No:							
INVP 2270	Budget OPEX						
	Budget CAPEX		350				350
Impact on RTB costs							
TOTAL BENEFITS $k							

Key Business Benefits:

- Maintain compliancy with FERC regulations
- Comply with audit recommendations

Key risks:

- There is a risk that the internal resources may not be available due to Transformation initiatives for both T&D and IS.
- There is a risk of not being in regulatory compliance which may result in fines.

Key Dates:

- April 2010 – Project Start-up

Sourcing Strategy:

This project will be resourced through internal resources as well as external resources.

Resources:

PM – project management activities that follow SDP Lifecycle

BA – expected requirements and business modelling delivery

EA – work with project team for an architecture design

Development – Vendor package and licensing

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Date: 08/12/09

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Investment Summary - Summary Sheet

Secure CNI Remote Access Enhancement (Citrix) - INVP 2276

(An Investment Summary paper by Nate Purdy for Mary Anne Douville)

Region:	US	**Category:**	Mandatory	**Legal Entity:**	ETO
Risk Score:	49.000	**Primary Driver:**	Reliability	**Project Classification:**	

Project Description:

This project would install remote access servers to improve security during remote access. This project is required to achieve conformance with the Information Security Standard ISMS 120 - Critical National Infrastructure (CNI).

ISMS 120 requirement 3.3.4 states the following: Support staff shall not have direct access to CNI components from non CNI networks. Access for onsite support shall be delivered through a 'proxy' service implemented via the use of emulation services (e.g. via CITRIX), which requires separation of corporate and CNI networks. Remote access is required to meet required EMS service levels.

Project Costs $k	**Yr 1 10/11**	**Yr 2 11/12**	**Yr 3 12/13**	**Yr 4 13/14**	**Yr 5 14/15**	**Total**
Start-Up - OPEX	$13k					
Start-Up – CAPEX						
Start-Up – risk margin	$3k					
Start-Up SUBTOTAL	**$16k**					**$16k**
Requirements & Design - OPEX						
Requirements & Design – CAPEX	$38k					
Requirements & Design – risk margin	$8k					
R&D SUBTOTAL	**$46k**					**$46k**
Development & Implementation – OPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Sub-Total D&I OPEX						
Risk Margin						
Development & Implementation – CAPEX						
People						
Software						
Hardware						
Telecommunications						
Service Contracts						
Sub-Total D&I CAPEX	$150k					
Risk Margin	$30k					
D&I SUBTOTAL	**$180k**					**$180k**
TOTAL PROJECT COSTS	**$242k**					**Total $242k**

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Non-regulated project – UPLIFT							
Non-regulated project – TOTAL							
Investment Plan No: INVP.....	Budget OPEX						
	Budget CAPEX						
Impact on RTB costs		$9k	$9k	$9k	$9k	$9k	$45k
The costs of this project will be allocated ETO 65% and EDG 35%.							
TOTAL BENEFITS $k							

Key Business Benefits:
-Aids to maintain EMS service levels.
-Aids in enhancing security of system.

Key risks:
-Failure to complete the project would likely result in non-compliance with Information Security Standard ISMS 120 requirement 3.3.4.

Key Dates:
Start-Up - 4/1/10
Receive Equipment and User Licenses - 5/1/10
Operational - 7/1/10
Project Closure - 8/2010

Sourcing Strategy:
The project would be resourced with IS resources. Estimated resource requirements include:

1 CNI Network Engineer - .5 FTE for 2 months during design and implementation
1 Wintel Server Engineer - .5 FTE for 1 month during design
1 EMS Engineer - .5 FTE for 2 months during design and implementation
1 Wintel Server Analyst - .5 FTE for 1 month during implementation
1 Enterprise Architect - .20 FTE for 1 month during Design Stage
1 CNI PM - .33 FTE for 5 months

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CAPEX IS Investment Proposal – Summary
Regulatory Cost Structure – Implementation of UI Planner
Shared Services, Shared, Project No. INVP 2391

(A project sanction paper by Anthony Rosenkrantz for Dave Campbell – 9 Sept 2009)

Description

The UI Planner application is being developed as a result of the Regulatory Cost Structure (RCS) Project. One of the workstreams within RCS is aiming to develop a consistent view of our financial data across the US regulated entities. There is a need to have better transparency of Cost of Service, Actual, and Plan data for each US regulated entity but not lose sight of our LOB structure. The UI Planner application is expected to significantly enhance National Grid's US regulatory planning and rate case support processes. It will improve transparency and consistency of reporting, and will allow for a comparison of Rate Plan data vs. Business Plan Data vs. Actual costs across all legal entities.

In addition, UIPlanner's "what-if" scenario planning capabilities will allow for the assessment of current and future level of costs relative to the existing rate agreements, a capability that currently does not easily occur today within existing processes and systems. The tool is expected to help National Grid better manage our regulated utilities within the current Line of Business framework.

Category: Policy driven
Risk score: 46, Primary Driver – Policy driven
Project Classification: Low Region: US

Finance

Sanction Cost Cost 1175K
Cost volatility: P20 cost: n/a P80 cost: n/a *For projects >£5m /$10m only*
Probability that project cost will exceed tolerance: n/a (Monte Carlo analysis) *For projects >£5m /$10m only*
Project included in approved Business Plan? No. INVP 2391 is a "walk in".
Project cost relative to approved Business Plan 100%
If cost > approved B Plan how will this be funded? Finance Shared Services

In August 2009 a 3 month pilot was completed, during the pilot UI Planner was installed and configured for Narragansett (GAS/DIST/TRAN) successfully. Results have been reviewed & verified by the various business partners and a decision has been taken to move forward with the full implementation of UI planner. As part of the 200k pilot, business requirements and designs were collected, and will be used to model the configuration for the rest of the legal entities.

Project is to be funded via substitution. The current plan is to use the money allotted to INVP1543 (Capex - LIPA AMI impact project – Jeff Daily). Ruth Sullivan & Jeff Daily to confirm that LIPA is to going to fund INVP1543 themselves.

	Current planning horizon								
$'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6+	Total	Lower Range P20	Upper Range P80
Proposed Investment	710	465					1,175		

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Resources	
Availability of internal resources to deliver project:	Green
Availability of external resources to deliver project:	Green
Operational impact on network system:	Green

- **Key issues**
- Bandwidth Business resources.

Key milestones

- Pilot of Narragansett rate case Completed – 31 August 2009
- Integration Requirements & Design Completed – 30 November 2009
- Infrastructure Requirements & Design – 30 November 2009
- Integration Development Completion – 30 December 2009
- Complete Implementation of UI Planner for the Massachusetts Gas Companies (Boston Gas, Colonial, and Essex legal entities). – 30 December
- Complete Implementation of UI Planner for the NIMO (Gas, Dist & Tran) – 28 February 2010
- Complete Implementation of UI Planner for the KEDNY, KEDLI (Gas) – 31 January 2010
- Complete Implementation of UI Planner for the Mass Electric (Dist & Tran) – 31 April 2010
- Implementation Completion – 30 July 2010
  (note, exact schedule TBC)
- Project closure – 31 November 2010

Climate change	
Contribution to National Grid's 2050 80% emissions reduction target:	Neutral
Impact on adaptability of network for future climate change:	Neutral
Are financial incentives (e.g. carbon credits) available?	No

Prior sanctioning history:

- Sanctioning for Pilot funded July, 2009 (Business funded project)
- Group Exec Approval obtained in September, 2009
- 9 Sept – IS Project Review Meeting for full sanctioning
- TBD – IS Global Technology Governance Group

Recommendations

The Sanctioning Authority is invited to:

(a) APPROVE the investment of $1,175 mil including risk margin of $100,000k by 30 September 2009

(b) NOTE that Dave Campbell is the Project Sponsor

(c) NOTE that Anthony Rosenkrantz is the IS Project Manager and has the approved financial delegation to deliver the project

Signature..... Date.....

Dave Campbell, James Molloy Process & Systems Manager, Regulatory Compliance

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IS Finance
I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....
Duncan Brown, Head of IS Finance, Global IS

Business Finance
I hereby confirm that the financial data supports the business case outlined in this paper.

Signature..... Date.....
Dave Campbell, VP, US Electric Dist Ops Finance

Information Services
I hereby support the recommendations made in this paper.

Signature..... Date.....
Ruth Sullivan, Acting Head of Finance, Shared Services & Corporate

Decision of the Sanctioning Authority
I hereby approve the recommendations made in this paper.

Signature..... Date.....
William F. Edwards, EVP US Shared Services

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CAPEX IS Investment Proposal – Summary
Regulatory Cost Structure – Implementation of UI Planner
Shared Services, Shared, Project No. INVP 2391
(A project sanction paper by Anthony Rosenkrantz for Dave Campbell – 9 Sept 2009)

1. Background

Over the next few years, as existing rate agreements expire, National Grid expects to submit many new rate case filings. Accordingly, the Regulatory Cost Structure (RCS) Project was launched to improve transparency and assess the current and future level of costs relative to the existing rate agreements. An output of the RCS Project is an expectation that we will be able to better manage our regulated utilities within the current Line of Business framework.

A collaborative governance committee, the RCS Committee, is in place to support/advise the project. The RCS Project is comprised of several Workstreams, one of which is Workstream 3 - Consistent View of Data. The goal of Workstream 3 is to capture Cost of Service, Actual, and Plan data for each regulated entity, and improve the US jurisdictional view of the financial data. To support this end, both internal and external tools were assessed. The team worked with IS to understand the capabilities of Hyperion Planning. In addition, the capabilities of seven vendors were assessed: the Analysis Group, AUS Consultants, The Brattle Group, Concentric Energy Advisors, Navigant, Utilities International, and Black & Veatch.

Upon further analysis, it was determined that Utilities International is the only vendor with software capabilities that could support both Business Planning by US regulated entity, as well as capture Cost of Service data to support the Regulatory Planning process. It was also determined that Hyperion could support Planning by US regulated entity, but not the Regulatory Planning process. Therefore, it was the decision of the RCS Committee to create two separate streams that would (1) Focus on modifying the Business Planning process to plan by regulated entity for the FY 2010/11 Plan (using Hyperion), and (2) Pilot Utilities International to assess their Regulatory Planning capabilities, with a secondary goal of assessing its capabilities to Plan by regulated entity.

Utilities International, Inc. is the pre-eminent provider of planning, budgeting and reporting solutions (both consulting and software) to the utility industry. They have developed UIPlanner, an integrated calculation engine that can manage all or a subset of budgeting, forecasting and planning needs. This tool interfaces with underlying systems and data and is typically built from a FERC chart of accounts. The advantage is it can span different entity types and manage scenario comparisons.

UI was recommended by other EEI member utilities and is used by Southern Company, NU, AEP, PG&E, FPL, Ameren, Pepco, Dominion, Entergy and Xcel Energy, among others. The Planner is a java based technology with built in transparency of formula inputs and calculations.

The UI Pilot kicked off on July 21. Based on the success of the pilot, the Finance and Regulation area would like to fully implement the UIPlanner tool across all legal entities. The full implementation of UIPlanner is the focus of this investment proposal.

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2. **Driver**
   a. Support the preparation of rate filings and rate strategy.
   b. Improve transparency and consistency of reporting.
   c. Allow for the assessment of current and future level of costs relative to the existing rate agreements.
   d. Allow the company to further control its costs and file for rate recovery on a timelier basis.
   e. Better manage our regulated utilities within the current Line of Business framework.

3. **Project Description**

   The UI Planner application is being installed as a result of Workstream 3: Consistent View of Data, a subset of the overall Regulatory Cost Structure (RCS) Project. The goal of Workstream 3 is to capture Cost of Service, Actual, and Plan data for each US regulated entity, and improve the US jurisdictional view of this data. The UI Planner application is expected to significantly enhance National Grid's US regulatory planning and rate case support processes. It will improve transparency and consistency of reporting, and will allow for a comparison of Rate Plan data vs. Business Plan Data vs. Actual costs across all legal entities.

   UIPlanner's "what-if" scenario planning capabilities will allow for the assessment of current and future level of costs relative to the existing rate agreements, a capability that currently does not easily occur today within existing processes and systems. This will allow National Grid to better manage our regulated utilities within the current Line of Business framework.

4. **IS / Business Issues**
   a. Availability of Business resources.

5. **Options Analysis**

Option	Recommendation	Rationale
Do Nothing:	Rejected	Manual processes are lengthy and not repeatable. Manual solutions are not sustainable given that we will be doing rate case filings on a yearly basis going forward. Current manual solutions do not provide required transparency & consistency between Business Plan's (UK chart) & Rate case filings (FERC chart).
Defer project:	Rejected	Not an option, due to rate case schedule
Hyperion Pillar	Rejected	Purely a budgeting tool
Hyperion Planning	Rejected	Costly, all functionality will have to be purpose built. Current US/UK Planning, forecasting, budgeting business process will be heavily impacted. As installed by Ngrid it currently only support UK chart of accounts

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Option	Recommendation	Rationale
		the RCS project requires Regulatory chart of accounts (FERC).
Hyperion Enterprise	Rejected	Hyperion Enterprise is a consolidation tool, not a modelling tool and only operates within UK chart of accounts. As part of the Hyperion solution evaluation. Finance Leadership & IS Leadership, a decision was made to upgrade Hyperion Enterprise to bring it to the latest operating system ensuring vendor support. Future consolidation solution will be determined as part of SAP roadmap.
Hyperion HFM	Rejected	Hyperion HFM is a consolidation tool, not a modelling tool. As part of the Hyperion evaluation. Finance Leadership & IS Leadership, a decision was made not to upgrade Hyperion HFM and not to propagate it use to either Legacy Ngrid (US) or Ngrid UK. Future consolidation solution will be determined as part of SAP roadmap.
Hyperion Strategic Finance	Rejected	Of the various Hyperion products strategic finance is the closet to meeting the requirements. Unfortunately it uses Hyperion planning as a core module/input, thus requiring the reimplementation of Hyperion planning (required for Regulatory chart of accounts) & the installation of Hyperion strategic finance. Hyperion strategic finance will also required heavy IS involvement as it is more of a toolkit solution compared to a canned solution like UI Planner. Hyperion is currently not part of Roadmap.
SAP	Rejected	Full US Sap footprint 3-5 years out. SAP to use UK chart of Accounts as natural accounts.

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Option	Recommendation	Rationale
		The Derivation of Regulatory chart of accounts for Actuals, Planning & budgeting yet to be completely understood. Current SAP footprint / Business Objects do not provide Financial modelling any canned solution for regulatory rate case reporting.
Implement UI Planner	Recommended	Best of breed application, which provides purpose built functionality & specialized consulting skills in support of regulated rate case filings. The implementation of UI Planner is a strategic decision by the Business enabling them to manage numerous rate cases over the coming years. Requires no real IS involvement.

6. Milestones

Key Milestones	Date	Responsible person...
Pilot Phase Initial scoping of the investment. Utilities International was onsite to help design & build the Narragansett Rate case using UI planner, Information gathered during the pilot was used to validate scope, time and costs for the remaining jurisdictions.	31 August 2009	Dave Campbell Bus & IS Project Managers (Sonia Caiazza, Anthony Rosenkrantz)
Implement UI Planner for all companies Paper to ISLT Development & Implementation Phase Requirements & Design Development & Build Go Live and Post-Implementation Support	10 September 2009 30 November 1 October 2009 31 July 2010	Bus & IS Project Managers (Sonia Caiazza, Anthony Rosenkrantz) Bus & IS Project Managers (Sonia Caiazza, Anthony Rosenkrantz) Bus & IS Project Managers (Sonia Caiazza, Anthony Rosenkrantz)

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Key Milestones	Date	Responsible person...
	31 October	Bus & IS Project Managers (Sonia Caiazza, Anthony Rosenkrantz)
Final Phase	2010	
Final Post Implementation Support	30 November 2010	Bus & IS Project Managers (Sonia Caiazza, Anthony Rosenkrantz)
Project Closure		

7. Safety, Environmental and Planning Issues

No Safety, Environmental or Planning issues anticipated.

Investment Recovery

8. Investment Classification

Policy driven

9. Regulatory Implications

This project will help National Grid formulate & model future regulated rate case filings in a consistent & timely fashion.

10. Customer Impact

This project will facilitate the Regulatory compliance team in managing future rate case fillings, ensuring that future business plans & rate case filings are better integrated.

Financial Impact

11. Cost Summary

The following table show the full costs for the project, which are indicative at this stage. This investment proposal seeks the full sanctioning of funds for the Development and Implementation of the remaining jurisdictional rate cases. This amounts to $1,175 mil and includes $100k risk range – a detailed breakdown is provided in Appendix B.

$'000s		Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Yr 6 +	Total	Lower Range P20	Upper Range P20
Project Cost	Opex	25						25		
	Capex	685	465					1,150		
IS Investment Plan	Opex									
	Capex									
Variance to plan	Opex	(25)						(25)		
	Capex	(685)	(465)					(1,150)		

The project will be funded by IS via substitution money from INVP1543 (LIPA AMI Billing Impacts) will be used as this project will be funded by LIPA itself (to be confirms by Ruth Sullivan)

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This project will increase IS ongoing support costs and annual vendor license/service fees. These costs have been confirmed during the Pilot stage.

RTB costs $'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Total
Current Annual RTB costs	1					1
New Annual RTB costs		50	51	51	51	204
Impact on RTB costs (new minus existing)	(1)	50	51	51	51	203
Variance to Plan	(1)	50	51	51	51	203

12. Cost Assumptions

IS are primarily limited to license fees, bulk of cost are allocated to implementation fees.

Vendor Implementation costs have been pre-negotiation costs and are not likely to change.

13. Benefits Summary

Benefits - $'000s	Yr 1 09/10	Yr 2 10/11	Yr 3 11/12	Yr 4 12/13	Yr 5 13/14	Total
Cost Savings		0	0	0	0	0

Currently there are no savings projects, this policy is driven.

14. NPV

The NPV for this project is (1284). The TCO log is attached in Appendix B, and includes assumptions.

15. Additional Impacts

Not applicable.

16. Execution Risk Appraisal

No	There is a risk that	Countermeasure or Action	Risk Range	Monitored by ....
1		Business discussing contingency plan.	$0K	Bus Program Manager

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Appendices

A. Resources

Step 1:

Role	National Grid Resources (FTEs)		External Resources (FTEs)			
	IS	Business	Contractor	Systems Integrator	ODC	Other
Program Managers (PgM)	.1	.1				
Project Managers (PM)		1				
Business Analysts (BA)		4		4		
Application Developer (AD)	.1					
Enterprise Architects (EA)	.1					
IS Security Analyst (SA)	.1					
Database Administrator (DBA)	.1					
Data Architects (DA)	.1					
Integration Analysts (IA)	.1					
Network Analyst (NA)	.1					

The following resources are NOT included in the project costs:
The Business Program Manager, the Business Project Manager and the Business' Bus Analysts.

Step 2:

External Resource Engagement:
Contracts/project plans have drawn up between Ngrid & Utilities international (consulting services) and have been reviewed by business (Dave Campbell & IS Procurement (Ken Boduch).

Step 3:

Name	Role*	Source**	FTE	Start	End	Availability***
Sonia Caiazza	PM	Bus	1	Aug 09	Nov 10	Confirmed
Ed Turieo, James Molly	BA	Bus	2	Aug 09	Nov 10	Confirmed
Jose Abrahams	EA	IS	.1	Aug 09	Nov 10	Confirmed
Jeff Judson	Dev	IS	.1	Aug 09	Feb 10	Confirmed
Sunil Sunkara	DBA	IS	.1	TBD	TBD	Confirmed
Jon Geggatt	DA	IS	.1	Aug 09	Aug 09	TBC
Dave Campbell	PgM	Bus	.1	Aug 09	Feb 10	Confirmed
Steven Pitts	PgM	IS	.1	Aug 09	Feb 10	Confirmed
Anthony Rosenkrantz	PM	IS	.2	Aug 09	Nov 10	Confirmed

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** Role: Use role abbreviations identified within Stage 1.*
*** Source: IS=National Grid IS FTE; Bus=National Grid Business FTE; Ext=External FTE*
**** Only enter Confirmed if approved by the relevant Portfolio Lead, otherwise enter TBC (to be confirmed)*

Step 4:

Resource Phasing related comments:
TBD when IS Project Mgr is assigned and on board.

B. TCO Log

The Total Project costs shown in the table below are indicative at this stage.

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TOTAL COST LOG OF IS INVESTMENT - FINANCIAL SUMMARY

Investment Name:	Regulatory Cost structure --- Implementation of UI planner
Project Name:	Regulatory Cost structure --- Implementation of UI planner
Investment Plan No:	INVP 2391
Investment Start (Financial Year):	09/10
Currency used:	US $

	09/10 $'000s	10/11 $'000s	11/12 $'000s	12/13 $'000s	13/14 $'000s	14/15 $'000s	15/16 $'000s	Total $'000s
INVESTMENT PLAN DETAILS:								
OPEX								
CAPEX								
Net RTB Impact								
INVESTMENT COST SUMMARY								
Start-Up - Opex								
Start-Up - Capex								
Start-Up - Risk Margin								
Start-Up - Subtotal								
Requirements and Design - Opex								
Requirements and Design - Capex	15							15
Requirements and Design - Risk Margin								
Requirements and Design - Subtotal	15							15
Development and Implementation - Opex								
People								
Software								
Hardware	25							25
Telecommunications								
Service Contracts								
Other								
Risk Margin								
Development and Implementation - Capex								
People	420	415						835
Software	200							200
Hardware								
Telecommunications								
Service Contracts								
Other								
Risk Margin	50	50						100
Development and Implementation - Subtotal	695	465						1,160
Total Investment Costs - Opex	25							25
Total Investment Costs - Capex	685	465						1,150
Total Investment Costs	710	465						1,175
Non-Regulated Project - Uplift								
Non-Regulated Project - Total	710	465						1,175
Future Investments								
VARIANCES TO INVESTMENT PLAN:								
OPEX	(25)							(25)
CAPEX	(685)	(465)						(1,150)
RTB								
Current Annual RTB Expenditure	1							1
New Annual RTB Expenditure		50	51	51	51	51	51	307
Net RTB Impact	(1)	50	51	51	51	51	51	306
Variance to Investment Plan	(1)	50	51	51	51	51	51	306
BENEFITS ANALYSIS:								
Investment Benefits								

Discount Rate:	15%	**NPV:**	(128)	**IRR:**	**VCR:** 0.13
Payback Period:	5 Years		Months		

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