

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of)
UPPER PENINSULA POWER COMPANY)
for authority to increase retail electric rates.)
_____)

Case No. U-16417

DIRECT TESTIMONY AND EXHIBITS OF

CHARLES W. SEVERANCE

FOR

UPPER PENINSULA POWER COMPANY

June 30, 2011

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**QUALIFICATIONS
OF
CHARLES W. SEVERANCE
PART I**

1 **Q. Please state your name, business address and position.**

2 A. My name is Charles W. Severance. My business address is Wisconsin Public
3 Service Corporation (“WPS Corp”), 700 North Adams Street, P.O. Box 19001, Green
4 Bay, WI 54307-9001. I am General Manager – Wholesale Electric & Renewable
5 Energy in the Wholesales Services Department of WPS Corp. Both WPS Corp and
6 Upper Peninsula Power Company (“UPPCO”) are wholly-owned subsidiaries of
7 Integrys Energy Group, Inc (“Integrys”).

8

9 **Q. For whom are you providing testimony?**

10 A. I am providing testimony on behalf of UPPCO.

11

12 **Q. Please describe briefly your educational, professional, and utility background.**

13 A. I have a Bachelors Degree from Michigan Technological University in Mechanical
14 Engineering. I began my career with Integrys subsidiary WPS Corp in 1985 in retail
15 marketing. Additionally, I have held positions as an Engineer in electric generating
16 plants, as Manager of Wholesale and Cogeneration activities, and as Manager of
17 bulk power. I am the chairperson of the Electric Planning Committees for both WPS
18 Corp and UPPCO. I have served as a member of various North American Electric

1 Reliability Council (“NERC”) committees, as well as the North American Energy
2 Standards Board (“NAESB”). In my current position, I provide services to UPPCO
3 related to Power Supply, Wholesale Sales, and Renewable Energy. I report to the
4 President of UPPCO.

5

6 **Q. Have you previously testified before any regulatory agency?**

7 A. Yes, I have. I submitted testimony before the Michigan Public Service Commission
8 (“Commission”) in Case No. U-16166, UPPCO’s 2011 test year general rate case.
9 Additionally, I have testified before the Public Service Commission of Wisconsin
10 (“PSCW”) on behalf of WPS Corp in various rate case proceedings, and in the
11 Weston 4 generating station Certificate of Public Convenience and Necessity
12 (“CPCN”) proceeding in Docket No. 6690-CE-187. I have also testified before the
13 Federal Energy Regulatory Commission (“FERC”) in docket ER05-164-000.

**CHARLES W. SEVERANCE
DIRECT TESTIMONY
PART II**

1 **Q. What is the purpose of your pre-filed direct testimony?**

2 A. The purpose of my pre-filed direct testimony is to provide an explanation of why
3 UPPCO's wholesale electric load is diminishing, and to provide information to support
4 the recovery of the loss on the sale of the Cataract hydro-electric generation facility
5 ("Cataract Facility").

6

7 Mr. Seth S. DeMerritt will provide specific information regarding the ratemaking
8 implications of these issues on the 2012 projected test year.

9

10 **Q. Are you sponsoring any exhibits in this proceeding?**

11 A. Yes, I am. I am sponsoring Exhibit A-9 (CWS-1)

12

13 **Q. Was this exhibit prepared by you or under your direction and supervision?**

14 A. Yes, it was.

15

16 **Q. Please describe Exhibit A-9 (CWS-1).**

17 A. Exhibit A-9 (CWS-1) contains documents to and from FERC regarding the Cataract
18 Facility. Many of these documents are confidential because they contain Critical
19 Energy Infrastructure Information, which cannot be released publicly.

20

21 **Loss of Wholesale Load**

22 **Q. How much wholesale load is UPPCO forecasting to lose by 2012?**

23 A. Historically, UPPCO has served six wholesale customers. These six customers
24 included the Ontonagon County Rural Electrification Association ("Ontonagon"), the
25 Alger Delta Cooperative ("Alger Delta"), and the municipal utilities serving Baraga,

1 Gladstone, L'Anse and Negaunee.

2

3 In 2009, the wholesale load for these six customers was equivalent to approximately
4 18% of UPPCO's total energy sales.

5

6 In 2012 UPPCO will not serve any wholesale energy load.

7

**Upper Peninsula Power Company
Wholesale Sales in kWh**

Customer	<u>Contract</u> <u>Expiration</u>	2007 <u>Actual</u>	2008 <u>Actual</u>	2009 <u>Actual</u>	2010 <u>Actual</u>	2011 <u>Forecast</u>	2012 <u>Forecast</u>
Baraga	12/31/10	23,325,309	23,666,759	21,700,451	21,427,630	-	-
Gladstone	12/31/10	34,607,318	33,810,742	32,973,367	33,344,811	-	-
L'Anse	09/30/11	15,986,466	15,629,593	15,345,520	15,449,911	11,389,433	-
Alger Delta	12/31/11	25,212,871	24,755,017	24,250,096	23,691,202	24,152,293	-
Negaunee	04/30/11	25,121,763	24,749,301	24,161,350	24,151,137	8,285,007	-
Ontonagon	12/31/09	26,282,259	25,416,060	25,205,048	-	-	-
Total		150,535,986	148,027,472	143,635,832	118,064,691	43,826,733	-
% Change from 2007			(1.67%)	(4.58%)	(21.57%)	(70.89%)	(100.00%)

8

9 **Q. Has UPPCO received formal notification from each of these six wholesale**
10 **customers that they will cease to take service from UPPCO in the future?**

11 A. Yes, we have.

12

13 **Q. Why have the six wholesale customers selected electric providers other than**

1 **UPPCO to serve their future wholesale electric needs?**

2 A. The six wholesale customers have informed UPPCO that cost and service level were
3 the most important reasons for selecting a provider other than UPPCO. As each of
4 their contracts with UPPCO neared expiration, the wholesale customers solicited
5 offers from UPPCO and other potential electric providers for wholesale electric
6 service. UPPCO provided an offer to each of these six wholesale customers. To
7 insure no subsidization of UPPCO's wholesale customers by either UPPCO's retail
8 customers or UPPCO's shareholder, UPPCO's offers were priced to reflect UPPCO's
9 fully-embedded cost to serve the required load. Due to confidentiality restrictions,
10 UPPCO does not know what prices or terms the other wholesale electric providers
11 offered. However, based on the fact that each wholesale customer chose a supplier
12 other than UPPCO, it's likely that each wholesale customer's total cost for service
13 was less than UPPCO's offer. Additionally, some wholesale customers stated that
14 some bidders were offering a full range services needed by small utilities, such as
15 supply procurement, compliance reporting and management, operational support,
16 development of energy efficiency and renewable energy programs, accounting
17 support, etc.

18
19 **Q. Have recent improvements to the electric transmission system in Wisconsin**
20 **and Upper Michigan contributed to UPPCO's loss of wholesale load?**

21 A. Yes, it has. In the past, due to constraints on the electric transmission system in
22 Wisconsin and Upper Michigan, these six wholesale customers had few choices
23 regarding what entity would serve their wholesale electric needs. With the various
24 improvements that have been made to the electric transmission system in Wisconsin
25 and Upper Michigan, these wholesale customers now have more choices regarding
26 their wholesale electric supplier.

27

1 **Q. Who will be serving the former UPPCO wholesale load in the future?**

2 A. UPPCO understands that Wisconsin Public Power, Inc. ("WPPI") will be serving each
3 of the six wholesale customers, except Ontonagon. UPPCO further understands that
4 each wholesale customer taking service from WPPI has become a member of WPPI,
5 with an attendant long term commitment to the organization. As of 2010, the
6 Ontonagon load is served by WPS Corp for a ten year term under WPS Corp's FERC
7 authorized Market Based Rate ("MBR") tariff. WPS Corp bid on the Ontonagon load
8 at the request of Ontonagon.

9
10 **Q. Please provide some background on WPPI.**

11 A. WPPI is a regional power company with headquarters in Sun Prairie, Wisconsin.
12 WPPI serves approximately 51 customer-owned electric utilities. Through WPPI,
13 these public power utilities share resources and own generation facilities to provide
14 electricity to more than 195,000 homes and businesses in Wisconsin, Upper
15 Michigan, and Iowa.

16
17 **Q. Did UPPCO offer services to the wholesale customers in an effort to retain their
18 load?**

19 A. Yes, it did. UPPCO offered a full range of services to the six wholesale customers at
20 prices that represent UPPCO's fully embedded cost to provide these services.
21 Feedback from the wholesale customers indicates that WPPI offered a service
22 package superior to UPPCO's offer.

23
24 **Q. Did UPPCO demonstrate any imprudence related to the loss of this wholesale
25 load?**

26 A. No, it did not. UPPCO's loss of wholesale load was due solely to the forces of an
27 expanded competitive market for wholesale electric services in the Upper Peninsula,

1 and not due to any imprudence on UPPCO's part.

2

3 **Q. Has UPPCO included the impact of this lost wholesale load on the retail**
4 **revenue requirement in the 2012 projected test year?**

5 A. Yes, it did. Please see the pre-filed direct testimony of Mr. Seth S. DeMerritt.

6

7 **Sale of the Cataract Facility**

8 **Q. Please provide background regarding the sale of the Cataract Facility.**

9 A. The Cataract Facility is a hydro-electric generation facility, FERC facility No. 10854,
10 with a nameplate capacity rating of 2 MW located near Gwinn in Marquette County,
11 Michigan. The Cataract Facility began generating electricity in 1929 and relicensed
12 in 1997.

13

14 **Q. Please describe the events that led UPPCO to consider alternate management**
15 **options for the Cataract Facility.**

16 A. In 2008, UPPCO ceased generation operations at the Cataract Facility due to
17 concerns about the structural integrity of the penstock. A 2009 study by the
18 independent engineering firm HDR, P.C., titled "Condition Assessment and
19 Remediation Alternative Evaluation Report," for the Cataract Facility found that much
20 of the penstock was at the end of its useful life, and needed to be replaced.

21

22 This independent engineering study is included in Exhibit A-9 (CWS-1).

23

24 In an effort to bring the Cataract Facility into compliance with its FERC license, a
25 repair plan was developed with an estimated cost of repairs of between \$2.8 million
26 and \$4.8 million. Based on that cost estimate, UPPCO became concerned that the
27 Cataract Facility would not be economically viable and, therefore, decided to
28 investigate alternate management options for the Cataract Facility, with the goal of

1 lowering costs for UPPCO customers.

2

3 **Q. What alternative management options were considered for the Cataract**
4 **Facility?**

5 A. Four options were considered:

- 6 1. Surrendering the FERC license and abandoning the facility (Option 1),
7
- 8 2. Surrendering the FERC license, leaving the dam in place, and transferring
9 ownership to a third party (Option 2),
10
- 11 3. Selling the facility to a party that would accept a transfer of the FERC license
12 and continue to operate the facility (Option 3), and
13
- 14 4. Upgrading the facility to meet FERC standards, and continuing to own and
15 operate the facility (Option 4).
16

17 **Q. Are all of the options viable?**

18 A. No, they are not. The second option was eliminated because UPPCO could not find
19 a third party willing to accept the ownership and the on-going maintenance
20 responsibilities. Options 1, 3 and 4 were considered viable.

21

22 **Q. Please describe the surrender the FERC license and abandon the facility option**
23 **(Option 1).**

24 A. The surrender the FERC license and abandon the facility option would require
25 UPPCO to petition the FERC for approval to surrender the Cataract Facility's license
26 and breach the dam. Additionally, UPPCO would be required to work with State of
27 Michigan and local agencies, including the Michigan Department of Natural
28 Resources, to determine the level of restoration required for the river and watershed.
29 As part of the surrender process, FERC would determine if there were any other
30 qualified parties interested in assuming the license. If there was another interested
31 party, FERC could approve a license transfer to them. FERC could also deny
32 UPPCO's request to surrender the license, and require that UPPCO bring the

1 Cataract Facility into compliance with FERC standards. As shown in the pre-filed
2 direct testimony and exhibits of Mr. Steven J. Daavettila, UPPCO estimates that
3 additional expenditures ranging from a low of approximately \$1.4 million, to a high of
4 \$5.7 million, would be required to surrender, abandon and restore the facility. The
5 wide range stems from the uncertainty related to the level of restoration required by
6 various state and federal agencies. A firm understanding of the restoration costs will
7 not be possible unless the Cataract basin was drained, and the relevant agencies
8 consulted.

9
10 **Q. Please describe the sale option (Option 3).**

11 A. Selling the Cataract Facility to a party that would accept a transfer of the FERC
12 license and continue to operate the facility (Option 3) is the product of a well-
13 advertised formal Request for Proposal (“RFP”) process issued on March 19, 2010.
14 A general press release announcing the RFP was issued by UPPCO, and was also
15 published by print and media outlets. The announcement was included on the
16 “Hydro World” website. Additionally, the list of FERC hydro license holders was
17 reviewed and personal invitations were sent to entities holding multiple North Central
18 Midwest licenses. Bidders had access to an electronic data room, a physical data
19 room, and the Cataract Facility itself. Bidders were given until April 30, 2010, to
20 develop proposals. Five entities expressed interest by signing confidentiality
21 agreements and performing due diligence but the only proposal received was from
22 UP Hydro, LLC, (“UP Hydro”) a subsidiary of North American Hydro Holdings, Inc. In
23 its proposal, it offered to pay UPPCO \$725,000 for the Cataract Facility, but required
24 that UPPCO pay \$2.2 million toward the cost of the repairing the penstock. UPPCO
25 did not accept this offer.

26
27 Subsequently, on August 11, 2010, UP Hydro revised its proposal and reduced

1 UPPCO's payment toward the cost of the penstock repair to \$1.725 million. With that
2 change, the sale option (Option 3) became the lowest cost option, and UPPCO
3 began efforts to execute the sale. In addition to the financial terms described above,
4 upon the closing date of the sale, UP Hydro would assume responsibility for all
5 operational or compliance risk due to events arising after the sale. UPPCO would
6 retain responsibility for potential environmental liabilities resulting from events prior to
7 the closing date, but would have no liability for non-compliance regardless of when it
8 occurred.

9
10 **Q. Please describe the upgrade and operate option (Option 4).**

11 A. Under the upgrade the Cataract Facility to meet FERC standards, and continuing to
12 own and operate the facility (Option 4), UPPCO would design penstock modifications
13 needed to restore the Cataract Facility to service, seek FERC approval and
14 authorization to make the repairs, and perform the upgrades. UPPCO's estimate of
15 the costs to perform the upgrades ranges from a low of \$2.8 million to a high of \$4.8
16 million. UPPCO would continue to operate the Cataract Facility in accordance with
17 its FERC approved license. UPPCO would retain all liability for past and future
18 compliance risk. UPPCO would continue to incorporate the Cataract Facility energy
19 and environmental attributes into its power supply portfolio.

20
21 **Q, Please describe the process used to evaluate the three options.**

22 A. A net present value analysis was performed for each option through the end of the
23 Cataract Facility's FERC license period, which is February 2037. Some of the more
24 significant factors in this analysis included:

- 25 1. The forecasted capital expenditures,
- 26 2. The forecasted fixed and variable O&M costs,
- 27 3. The forecasted replacement power costs, and

1 4. The forecasted value of renewable energy credits.

2

3 In addition to the financial analysis, other difficult to quantify issues were considered,
4 including:

- 5 1. The responsibility for existing and future liabilities,
6 2. The impact on the public, and
7 3. The impact on UPPCO's operating efficiency.

8

9 **Q, What were the results of the analysis?**

10 A. As shown in the pre-filed direct testimony of Mr. Steven J. Daavetilla, the Cataract
11 Facility net present value of revenue requirements through 2037 for each option are
12 shown below:

13 Sale Option (Option 3): \$4.14 million

14 Surrender license and abandon Option (Option 1): \$5.07 million

15 Upgrade and Operate Option (Option 4): \$7.4 million

16

17 Based on this analysis, UPPCO determined that the most reasonable and prudent
18 course of action is to sell the Cataract Facility (Option 3). UPPCO entered into an
19 Asset Sales Agreement ("ASA") with UP Hydro to, among other things, sell the
20 Cataract Facility to UP Hydro. UPPCO also negotiated a Purchase Power
21 Agreement with UP Hydro to purchase energy produced at the Cataract Facility.
22 Under the ASA, UP Hydro will assume responsibility for all on-going Cataract Facility
23 obligations. UPPCO will pay UP Hydro \$1 million, which represents a netting of the
24 \$0.725 million purchase price with UPPCO's \$1.725 million payment towards
25 repairing the penstock. Thus, the sale is estimated to result in a net loss to UPPCO
26 of approximately \$1.9 million, including approximately \$56,100 for transaction costs,
27 as detailed on Exhibit A-3 (SSD-3), Schedule C20.

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On December 15, 2010, in docket P-10854-109, FERC approved the transfer of the Cataract Facility license to UP Hydro. The joint license transfer application of UPPCO and UP Hydro, and the subsequent FERC approval, are included here as Exhibit A-9 (CWS-1).

Q. What is UP Hydro’s estimated cost to upgrade the Cataract Facility to FERC standards?

A. UP Hydro has not shared its estimate with UPPCO.

Q. Will the \$1 million net payment from UPPCO to UP Hydro cover UP Hydro’s costs of the required upgrades to the Cataract Facility?

A. Not necessarily. UP Hydro has indicated that it evaluated the economic viability of the Cataract Facility based on the relationship of the energy and renewable credit revenue to the capital and O&M needed to upgrade and operate the Cataract Facility. Based on the fact that UP Hydro adjusted the pricing in its proposal, the implication is that the \$1 million net payment is simply a third revenue source needed to make the Cataract Facility financially viable for UP Hydro, and not necessarily the cost of the Cataract Facility upgrades.

Q. Did UPPCO demonstrate any imprudence related to the loss on the sale of the Cataract Facility?

A. No, it did not. As shown in Mr. Daavettila’s pre-filed direct testimony, the sale of the Cataract Facility is the lowest cost long-term option for UPPCO’s customers. Therefore, no imprudence has occurred.

Q. What is the status of UPPCO’s deferred accounting application for the Cataract

1 **Facility?**

2 A. On March 25, 2010, UPPCO submitted an application for deferred accounting for the
3 net loss on the sale of the Cataract Facility. The Commission granted UPPCO's
4 request in its July 27, 2010 Order Approving Settlement Agreement in Case No. U-
5 16208.

6

7 **Q. Has UPPCO proposed an amortization of the estimated deferred net loss on the**
8 **sale of the Cataract Facility in the 2012 test year?**

9 A. Yes, it has. Please see the pre-filed direct testimony of Mr. Seth S. DeMerritt.

10

11 **Q. Does this conclude your pre-filed direct testimony?**

12 A. Yes, it does.